



U.S. ENVIRONMENTAL PROTECTION AGENCY

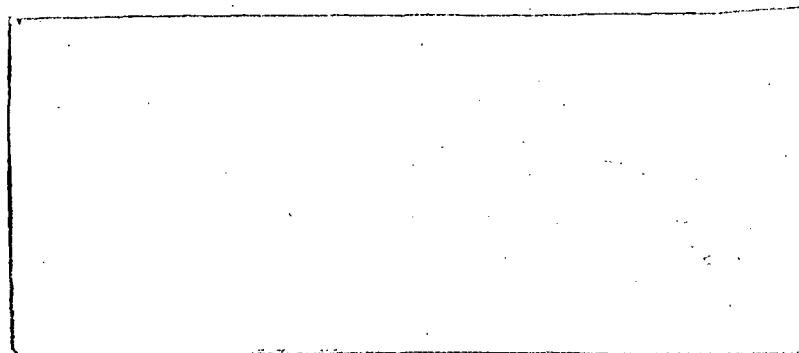
Contract No. 68-01-6669

SDMS Document



67638

TECHNICAL
ASSISTANCE
TEAM



Region - II

ROY F. WESTON, INC.

Spill Prevention & Emergency Response Division

In Association with Jacobs Engineering Group Inc. Tetra Tech Inc.
and ICF Incorporated



WESTON
DESIGNERS CONSULTANTS

000259

TAT-02-F-03267

SCP CARLSTADT PRINCIPAL
RESPONSIBLE
PARTY CLEANUP SUMMARY REPORT

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INTRODUCTION

The SCP/Carlstadt project was a responsible party cleanup at the former Scientific Chemical Processing (SCP) facility in Carlstadt, New Jersey, where five tanks, containing an estimated 31,500 gallons of PCB contaminated liquids and sludges, were left abandoned (Photos 1 and 2). EPA determined that the release and threatened release of one or more hazardous substances from the facility could present an imminent and substantial endangerment to the public health, welfare and the environment.

Administrative Order II-CERCLA-50115, was issued to Inmar Associates, owner of the property, on October 23, 1985.

Site monitoring of this cleanup was requested of the Response and Prevention Branch by the Site Investigation and Compliance Branch, Region II, EPA. Monitoring was performed by the TAT group of Weston SPER.

OBJECTIVE

This project had two objectives:

- 1) Remove and properly dispose of the PCB contaminated liquids and sludges of the site.
- 2) Decontaminate, and remove from the site, the tanks containing the contaminated liquid and sludge.

Accomplishing these objectives would remove the immediate threat to health and environment and would clear the area so that a separate remedial investigation could begin.

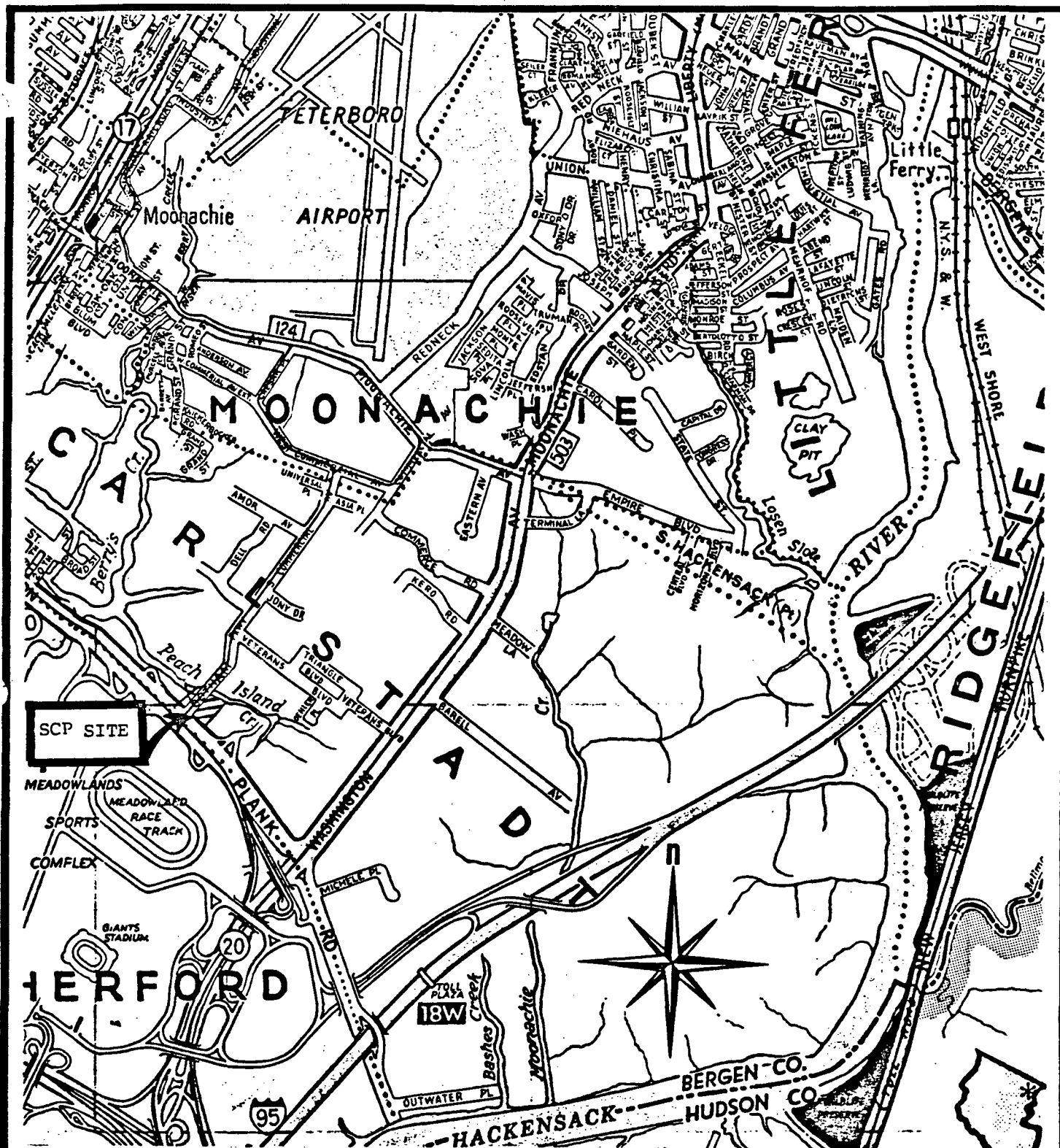
LOCATION

The site is located at the former SCP facility at 216 Paterson Plank Road, Carlstadt, Bergen County, New Jersey. It is bounded on the north by Peach Island Creek, on the east by the Carolina Trucking Facility, on the south by Paterson Plank Road, and on the west by Gotham Parkway (Figures 1 and 2).

The site is readily accessed by several gates along Paterson Plank Road.

TIME AND SCOPE OF OPERATIONS

Removal efforts began on April 2, 1986, when the first of three truckloads of liquid was drawn from the tanks and taken to the Chemical Waste Management (CWM) facility in Chicago for incineration.



Base map adapted from Hagstrom
Bergen-Rockland Atlas, second
edition, no. 1104058
Scale: 1" = approx. 2100'

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SPILL PREVENTION &
EMERGENCY RESPONSE DIVISION

EPA PM

Harris

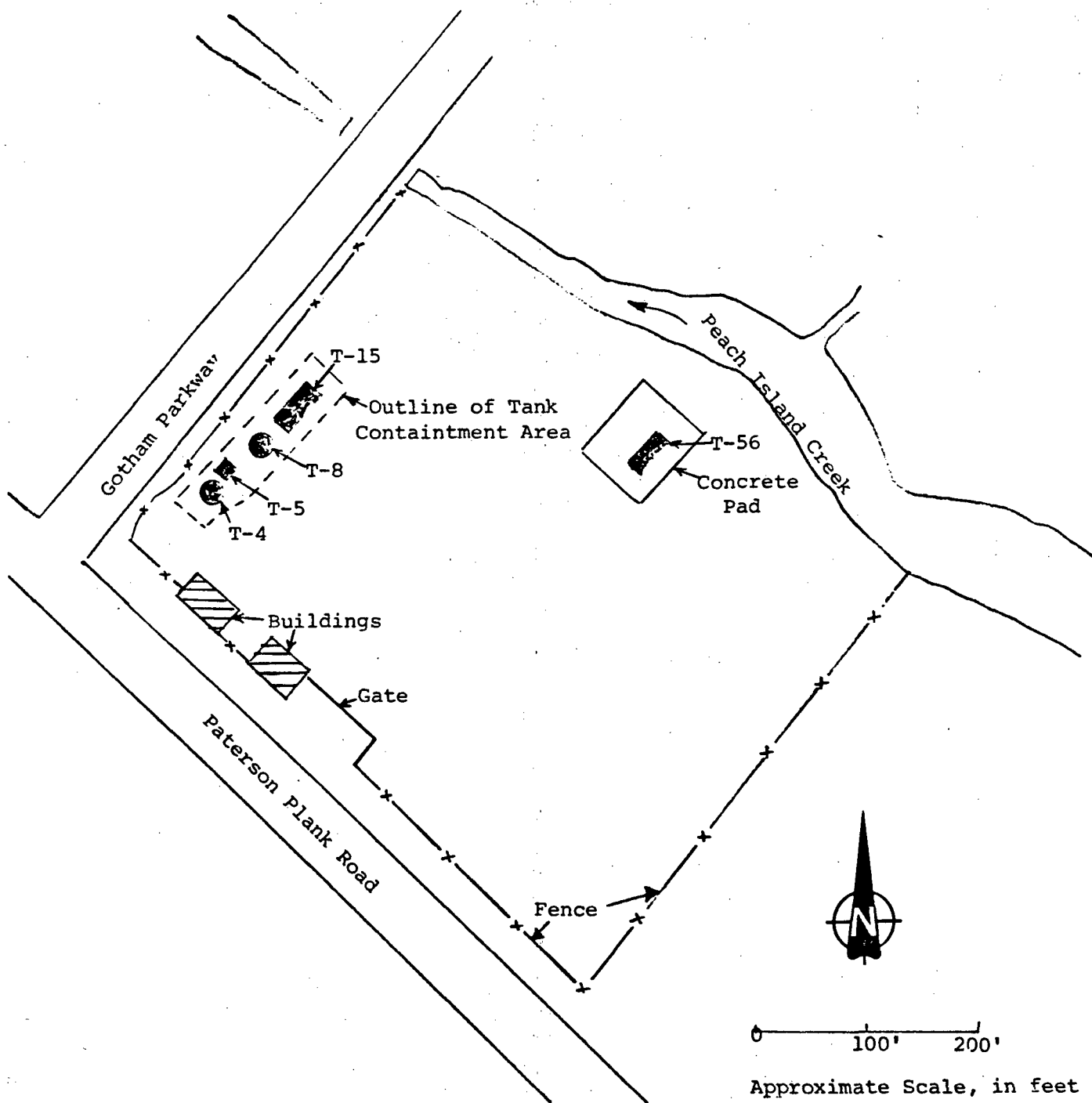
Figure 1

In association with
ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.

TAT PM

Simonsen

Site Location



Notes;

- 1) Tank locations are approximate and not to scale.
- 2) Base map reference: aerial photograph no. 3818-6-35, March 27, 1984. Scale 1"=100'

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SPILL PREVENTION &
EMERGENCY RESPONSE DIVISION

EPA PM

R. Harris

Figure 2

In association with

ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.

TAT PM

J. M. Simonsen

Site Map

On April 18, 1986, Chemical Waste Management, acting as contractor for Inmar Associates, sampled the sludges in each of the five tanks. Four sets of splits of the samples were made; the first set went to CWM, the second to Region II, EPA, and the third to Intech Biolabs. The fourth set was retained by Inmar Associates, but never analyzed. This set was subsequently disposed of along with the sludges of their respective tank.

The PCB values obtained by each lab, for the sludge of any given tank, ranged considerably (see Appendix 1 for values), probably because of the heterogeneity of the sludge. For example, one analysis of T-4 sludge showed a value of 5,900 ppm but when the sample was homogenized, the subsequent value was found to be less than 500 ppm. However, it was possible to make a determination of disposal methods for the sludges, based on those ranges.

The sludges of T-4 and T-15, having a PCB concentration of less than 500 ppm, were deemed suitable for disposal by landfill, and were subsequently removed to the CWM landfill at Emelle, Alabama. PCB concentrations in excess of 500 ppm necessitated the incineration of sludges contained in tanks T-8 and T-56. These sludges were subsequently removed to the CWM incinerator in Chicago, Illinois.

The sludges of T-5 currently present a problem: PCB levels are far too high for this material to be landfilled, but the sludge also contains lead, mercury, chromium, and cadmium, making this material unacceptable for incineration (see Appendices 1 and 5). Until this issue can be resolved, the tank and its sludge remain on site, although stored in a more secure manner than it was at the start of removal operations.

At this time, the tank is being stored in a roll-off, which has been lined with plastic sheeting, and covered with a heavy-duty tarp. The tarp is held securely in place by a series of black rubber shock cords. PCB warning stickers have been affixed to the tarp and are readily visible. Additionally, the tank/roll-off combination has been moved onto the cement pad formerly occupied by T-56. Tank T-5 was stored in this fashion on December 15, 1986, after EPA demanded that the tank be stored in a more secure manner. Prior to that demand, the tank had remained in the same setting and condition that it had when operations began in April. For additional details on this situation see Appendix 5.

Actual cleanup operations began during the week of July 14, 1986, and continued into September, 1986. During this period, Tanks 4, 8, 15 and 56 were emptied of their respective sludges, which were then drummed, stabilized, and removed for disposal.

Decontamination of the tanks themselves began in August, and continued into September, at which point the tanks were cut up and removed as scrap, except for T-5, which remains on site.

SAFETY PRACTICES

Most site activity was conducted in Level "C" protective clothing except the period during which sludge from T-8 was worked; during this time workers were in Level "B". The decision to upgrade the level of protection was based on air monitoring which showed significant increases of organic vapors when the sludge was being mixed. Level "B" was also used on those occasions when workers entered the tanks for inspection, or final sludge removal.

Use of this level of protective gear introduced a serious threat of heat exhaustion. The operations were conducted during summer months with air temperatures often climbing into the low 90's accompanied by high humidity. To try and compensate for this, working hours were shifted so that operations would begin at 0600 hours, and stop at about 1500 hours. Occasionally, however operations continued until about 2000 hours.

The heat, combined with a lack of proper supervision introduced an additional complication: workers began to ignore proper safety procedures. They often failed to properly duct tape openings of protective clothing, and frequently substituted uncoated tyvecs for coated tyvecs or saranex. Because of concern over these issues by the TAT member monitoring the site, two site safety audits were conducted, and the EPA OSC expressed this concern to both Inmar Associates and Chemical Waste Management. The expression of these concerns resulted in greatly improved safety practices, with work crews finally working according to accepted safety practices.

MATERIALS HANDLING

Materials at the site were divided into four categories for disposal purposes:

- 1) Liquid waste
- 2) Low level sludge
- 3) High level sludge
- 4) Low level solid debris

1) Liquids

Liquids at the site consisted of rainwater which, over time, had accumulated in the tanks, and also water used for decontamination. All of these liquids were removed to the CWM incinerator in Chicago, Illinois.

Liquids were first removed at the very start of operations (Photo 3) because the accumulated rainwater had effectively created a "water blanket" on top of the sludges. This "water blanket" had to be removed before the sludges could be accessed. Disposal of liquids was essentially an on-going process, because water continued to accumulate from rainfall, and regular periods of decontamination. To handle this accumulation, T-4, after it had been emptied of its sludge, was used as a storage container until near the end of operations. Then T-4 was off loaded, decontaminated, and removed. The stored liquids were then sent to Chicago for incineration.

2) Low Level Sludges

This category consisted of those sludges from T-4 and T-15, which, having a PCB concentration of less than 500 ppm (Intech Lab analysis showed 15 ppm and 135 ppm for T-4 and T-15, respectively), were deemed suitable for disposal by landfilling under the regulations of the Toxic Substances Control Act (TSCA). Because sludges from both of these tanks were to be disposed of in the same manner, they were effectively treated as one waste.

First, the sludges were pumped onto a vac-truck, and then off-loaded from the vac-truck into 55-gallon steel drums. As operations progressed, the sludge of T-15 proved to be too viscous for pumping. As a result, the top of T-15 was removed and the sludge was scooped out with a backhoe (Photo 4). The sludge was then poured into the drums through a hopper constructed of plywood, which was used in order to minimize spillage.

After all of the drums were partially filled with sludge, kiln dust was added to induce stabilization. The mixture was then allowed to stand, and was periodically inspected for free liquids: if free liquids were discovered, additional kiln dust was added until stabilization was achieved (Photo 4). When all of the drums were believed by CWM personnel to be stable, they were shipped for disposal to the CWM landfill facility at Emelle, Alabama. Total drum count was 344.

3) High Level Sludge

This group consisted of sludges from T-8 and T-56 which, having PCB concentrations of greater than 500 ppm, were required by TSCA regulations to be disposed of by incineration (Intech Lab analysis showed PCB values of 4,650 ppm for T-8, and 1,240 ppm for T-56). Sludges from these tanks were shipped by truck to the CWM incinerator at Chicago, Illinois for disposal.

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Sludges from T-56 were removed by scooping the sludge out with a backhoe, after a portion of tank's top had been removed (see Photo 6), and loading the sludge into a plywood sluiceway which had been constructed for the site. At this point, sawdust was mixed in to stabilize the sludge, and improve its ability to incinerate. The subsequent mixture was then loaded into a total of 92 thirty gallon plastic drums, which were shipped for disposal.

Sludge from T-8 was handled in the same manner, however, because of it's higher PCB concentration, the use of 3.5 gallon buckets was required. A total of 1,027 such buckets were loaded and shipped for disposal.

4) Low Level Solid Waste

This waste consisted of soil contaminated by spillage or removed as a precautionary measure, as well as discarded protective clothing and miscellaneous contaminated debris. Approximately 90 cubic yards of this material was accumulated, all of which was stored in covered roll-offs, (Photo 7) until it was removed to the CWM landfill facility at Model City, New York.

Disposal methods for all wastes are summarized in Appendix 3.

TANK DECONTAMINATION AND DISPOSAL

All tanks were hand scraped and washed down with a solution of penetone and water which was run through a high pressure nozzle, commercially known as a "blaster". In order to control the accumulation of used wash solution, washing was done within the tank whenever possible, with the accumulated solution later being pumped out into a tanker. Some of the relatively smaller pieces were washed down after having been placed in T-15, which acted as a catch basin. These pieces were then placed on plastic sheeting and allowed to dry (Photo 8).

Although the area where the washing took place was bermed, many pieces of debris were blown from the tanks because of the high pressure nozzle. Therefore, to be sure all contaminated debris was removed from the site, all of the soil in the general area of the washing was scraped and subsequently disposed of as low level solid waste.

Next, all of the tanks were visually inspected, and wipe samples for PCB's were taken. Usually, the wipe samples were taken over several parts of the tank, and in some cases, were deliberately biased so that the "least clean" area was sampled (all of the tanks visually appeared quite clean). All of the wipe sample results were found to be "none-detected" for PCB's.

At this point, all of the tanks were considered by the OSC to be clean and suitable for removal. The tanks were then cut up using a welding torch and removed by a scrap metal dealer (Photos 9 and 10).

SPILLS

Two spills of material associated with this site occurred during site operations. The first occurred on site when the back of a vacuum truck used for off loading the tanks was inadvertently opened by a worker: an estimated 3,000 gallons of material was spilled (Photos 11 and 12). All of the material was immediately vacuumed up and was later disposed of along with the rest of the sludges from the tanks from which they came (T-4 and T-15).

Soil contaminated by this spill was scraped up and stored in covered roll-offs until disposal could be arranged. Sample analysis by CWM showed PCB and flash point levels were low enough that the soil could be landfilled, and it was later removed to the CWM landfill at Model City, New York.

A second spill and clean-up occurred in Pennsylvania when the above material was in transit to the landfill. Apparently, while the soil was being stored it accumulated a good deal of rain water, despite the fact that the roll-offs were well covered by tarps. Although the roll-offs were previously drained by pumping, and kiln dust had been added to help stabilize the soil and water mix, enough water apparently remained in the soil for leakage to occur during transport. This leakage was probably aided by the pressure exerted by the weight of the material on itself.

APPENDIX 1

LAB ANALYSIS

000270



158 Tices Lane East Brunswick, New Jersey 08816 (201) 257-1050

ANALYTICAL LABORATORY REPORT

Chemical Waste Management, Inc.
Technical Center
150 W. 137th Street
Riverdale, IL 60627

Sample No: 04.2324.6

Sample ID: Solvent Sludge - Tank #T4 - #014 = ESD 088512

PARAMETER	RESULT	DETECTION LIMIT
		ppm
Aroclor 1016	ND	.02
Aroclor 1221	ND	.02
Aroclor 1232	ND	.02
Aroclor 1242	ND	.02
Aroclor 1248	15.0 (5920)	.02 (5)
Aroclor 1254	ND	.02
Aroclor 1260	ND	.02

Date Reported: 5-15-86

Attested to by: L.W. HAYMON, Ph.D.

000271



158 Tices Lane East Brunswick, New Jersey 08816 (201) 257-1050

ANALYTICAL LABORATORY REPORT

Chemical Waste Management, Inc.
Technical Center
150 W. 137th Street
Riverdale, IL 60627

Sample No: 04.2322.6

Sample ID: Solvent sludge - Tank #T8 - #008 \equiv ESD 088530

PARAMETER	RESULT ppm	DETECTION LIMIT ppm
Aroclor 1016	ND	.02
Aroclor 1221	ND	.02
Aroclor 1232	ND	.02
Aroclor 1242	ND	.02
Aroclor 1248	ND	.02
Aroclor 1254	ND	.02
Aroclor 1260	4650.0 (24200)	.02 (5)

Date Reported: 5-15-86

Attested to by: L.W. HAYMON, Ph.D.

000272



158 Tices Lane East Brunswick, New Jersey 08816 (201) 257-1050

ANALYTICAL LABORATORY REPORT

Chemical Waste Management, Inc.
Technical Center
150 W. 137th Street
Riverdale, IL 60627

Sample No: 04.2323.6

Sample ID: Solvent sludge - Tank #T5 - #011 ~~ESD~~ 088531

PARAMETER	RESULT	DETECTION LIMIT
	ppm	ppm
Aroclor 1016	ND	.02
Aroclor 1221	ND	.02
Aroclor 1232	ND	.02
Aroclor 1242	ND	.02
Aroclor 1248	32,100.0	.02
Aroclor 1254	ND	.02
Aroclor 1260	995.0 (170,725)	.02 (262)

Date Reported: 5-15-86

Attested to by: L.W. HAYMON, Ph.D.

000273



158 Tices Lane East Brunswick, New Jersey 08816 (201) 257-1050

ANALYTICAL LABORATORY REPORT

Chemical Waste Management, Inc.
Technical Center
150 W. 137th Street
Riverdale, IL 60627

Sample No: 04.2320.6

Sample ID: Solvent sludge - Tank #T56 - #002

≡ ESD 088526

PARAMETER	RESULT ppm	DETECTION LIMIT ppm
Aroclor 1016	ND	.02
Aroclor 1221	ND	.02
Aroclor 1232	ND	.02
Aroclor 1242	ND	.02
Aroclor 1248	ND	.02
Aroclor 1254	ND	.02
Aroclor 1260	1240.0 ppm (8430)	.02 (5)

Date Reported: 5-15-86

Attested to by: L.W. HAYMON, Ph.D.

000274



158 Tices Lane East Brunswick, New Jersey 08816 (201) 257-1050

ANALYTICAL LABORATORY REPORT

Chemical Waste Management, Inc.
Technical Center
150 W. 137th Street
Riverdale, IL 60627

Sample No: 04.2321.6

Sample ID: Solvent sludge - Tank #T15 - #005 \equiv ESO 088527

PARAMETER	RESULT ppm	DETECTION LIMIT ppm
Aroclor 1016	ND	.02
Aroclor 1221	ND	.02
Aroclor 1232	ND	.02
Aroclor 1242	ND	.02
Aroclor 1248	85.0 (<62)	.02 (62)
Aroclor 1254	ND	.02
Aroclor 1260	47.0 (<62)	.02 (62)

Date Reported: 5-15-86

Attested to by: L.W. HAYMON, Ph.D.

000275

This Report is intended for the sole use and benefit of Waste Management and its companies. No representation concerning significance of the reported data is made to any other person or entity.



FROM SAMPLE CONTAINER

LABORATORY NAME: Chemical Waste Management 86002888 PROF: ENR 04/23/86
 ADDRESS: Technical Center SCF/ENRAC EAST/ROU MIS
NEWARK, NJ
 DATE SAMPLE RECEIVED AT LAB: SRCE: ENC SITE: INC ALA 013
SOLVENT SLUDGE/T04

LAB SAMPLE NUMBER ASSIGNED: _____
 CERTIFICATION: Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision, using sample preparation and analytical methods and analytical equipment specified or approved in the most recent "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," SW 846, USEPA Office of Solid Waste. This laboratory follows a quality assurance control program, including a sample chain of custody procedure.

DATE OF REPORT: 4-8-86 SIGNATURE: [Signature] 5/9/86

LAB MANAGER NAME: _____

PHYSICAL CHARACTERISTICS OF WASTE

Incidental

SAMPLE VOLUME: _____ COLOR: Dark Brown liq.
Dark Brown
Solid 2-20%
 ODOR: ☐ NONE ☒ MILD ☐ STRONG
 PHYSICAL STATE @ 70°F: ☒ SOLID ☐ SEMI-SOLID ☐ LIQUID ☐ POWDER
 LAYERS: ☐ MULTILAYERED ☒ BILAYERED ☐ SINGLE PHASED
 FREE LIQUIDS: ☒ YES ☐ NO
 VOLUME: 80 %

Test	As Received	Extraction Procedure	Date of Analysis	Test	As Received	Extraction Procedure	Date of Analysis
Specific Gravity	<u>0.99</u>						
pH	<u>7.0</u>						
Acidity % as							
Alkalinity % as				Phenols, mg/l			
C, mg/l				Cyanides, as CN Total mg/l	<u>410</u>		
B, mg/l				Cyanides, as CN Free mg/l			
Total Solids @ 105°C	<u>25.5%</u>						
Total Dissolved Solids mg/l				Nitrogen Ammonia, as N mg/l			
Residue on Evaporation @ 180°C				Total Kjeldahl Nitrogen as N mg/l			
Flash Point F°	<u>70</u>			Total Alkalinity, P as CaCO ₃ mg/l			
Ash Content, on ignition (%)	<u>0.85%</u>			Total Alkalinity M as CaCO ₃ mg/l			
Heating Value, BTU/lb	<u>114.77</u>			Total Hardness as CaCO ₃ mg/l			
"Acid Scrub." gNaOH/g				Calcium Hardness, as CaCO ₃ mg/l			
Mercury, as Hg, mg/l	<u>19.6</u>			Magnesium Hardness, as CaCO ₃ mg/l			
Arsenic, as As, mg/l	<u>0.71</u>						
Barium, as Ba, mg/l	<u>24.5</u>			Oil and Grease, mg/l	<u>412.0</u>		
Bromine as Br, mg/l							
Cadmium, as Cd, mg/l	<u>40.10</u>			Selenium, as Se, mg/l	<u>45.0</u>		
Chromium, Total as Cr, mg/l	<u>16.9</u>			Arsenic, as As, mg/l	<u>2.50</u>		
Hexavalent Chromium as Cr, mg/l				Aldrin, mg/l	<u>1</u>		
Copper as Cu, mg/l	<u>2.62</u>			Chlordane, mg/l			
Iron, Total as Fe, mg/l				DDT, mg/l			
Iron, dissolved, as Fe, mg/l				Dieldrin, mg/l			
Lead, as Pb, mg/l	<u>147</u>			Endrin, mg/l			
Manganese, as Mn, mg/l				Heptachlor, mg/l			
Magnesium, as Mg, mg/l				Lindane, mg/l			
Mercury, as Hg, mg/l	<u>11.357</u>			Methoxychlor, mg/l			
Nickel, as Ni, mg/l	<u>9.73</u>			Toxaphene, mg/l			
Selenium, as Se, mg/l	<u>5.30</u>			Parathion, mg/l			
Silver, as Ag, mg/l	<u>20.15</u>			2,4-D, mg/l			
Iron, as Zn, mg/l	<u>90.1</u>			2,4,5-TP (Silvex), mg/l			
Sulfur, as S, mg/l	<u>0.63</u>			PCB's, mg/l TOTAL	<u>116.5</u>		
Sulfur, as S, mg/l	<u>4.30</u>			PCB's, mg/l	<u>114.1</u>		
Carbonates, as HCO ₃ , mg/l				PCB's, mg/l	<u>40.6</u>		
Total Sulfur, mg/l	<u>3430</u>			PCB's, mg/l	<u>4.97</u>		
Fluorides, as F, mg/l	<u>33100</u>						
Chlorides, as Cl, mg/l	<u>131</u>						
Nitrates, as NO ₃ , mg/l							

000276

5/9/86

WEIGHT & SOLVENTS

Trichlorofluoromethane	_____	Methyl Isobutyl Ketone	<u>0.3</u>
Ethyl Ether	_____	Tetrachloroethylene	<u>0.3</u>
Methanol	_____	Butyl Acetate	<u>0.09</u>
1,1,2-Trichloro-1,2,2-trifluoroethane	_____	Ethylbenzene	<u>0.2</u>
Ethanol	_____	Xylenes	<u>1</u>
Acetone	<u>0.3</u>	Styrene	_____
Methylene Chloride	<u>0.5</u>	2-Ethoxyethanol Acetate	_____
Isopropanol	_____	2-Butoxyethanol	_____
Carbon Tetrachloride	_____	Cyclohexanone	<u>1.1</u>
Ethyl Acetate	<u>0.1</u>	Chlorobenzene	_____
Methyl Ethyl Ketone	<u>0.8</u>	o-Dichlorobenzene	_____
1,1,1-Trichloroethane	_____	Hydrocarbons C7-16	<u>4</u>
Benzene	<u>0.09</u>	High-boiling organics	_____
Trichloroethylene	<u>0.6</u>	(B.P. > 290°C)	<u>3</u>
Isobutanol	_____	Other Solvents:	_____
n-Butanol	<u>0.1</u>	chloroform	<u>0.4</u>
Toluene	<u>2</u>	1,2-dichloroethane	<u>0.2</u>
2-Ethoxyethanol	_____	o-Benzenes	<u>0.4</u>
		p-Benzenes	<u>0.08</u>
		Dichlorobenzene	<u>0.05</u>
		Bromoxylene	<u>0.2</u>
		Isophorone	<u>0.3</u>
		Naphthalene	<u>0.06</u>

Detection limit for individual components is approximately 0.1% by weight.

A Blank = Not Detected.

Sample Prep 2.73g + 3.86g CS-

Comments 1.1

000277

SPECIAL WASTE ANALYSIS REPORT

This Report is intended for the sole use and benefit of Waste Management and its companies. No representation concerning significance of the reported data is made to any other person or entity.



WASTE PROPERTY SHEET CODE



LABORATORY NAME: Chemical Waste Management

86002287 PROF: ENR
SCF/ENRAC EAST/ROD MIS
NEWARK, NJ

04/23/86

ADDRESS: Technical Center

SRC: ENC SITE: INC ALA
SOLVENT SLUDGE/T5

010

DATE SAMPLE RECEIVED AT LAB

LAB SAMPLE NUMBER ASSIGNED

CERTIFICATION: Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision, using sample preparation and analytical methods and analytical equipment specified or approved in the most recent "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," SW 846, USEPA Office of Solid Waste. This laboratory follows a quality assurance control program, including a sample chain of custody procedure.

DATE OF REPORT: 5/9/86

SIGNATURE

D. E. Tuck

LAB MANAGER NAME:

PHYSICAL CHARACTERISTICS OF WASTE

Incidental

SAMPLE VOLUME <u>1 qt</u>	COLOR <u>Black</u>	ODOR: <input checked="" type="checkbox"/> NONE <input type="checkbox"/> MILD <input type="checkbox"/> STRONG	PHYSICAL STATE @ 70°F <input checked="" type="checkbox"/> SOLID <input type="checkbox"/> SEMI-SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> POWDER	LAYERS <input type="checkbox"/> MULTILAYERED <input type="checkbox"/> BILAYERED <input checked="" type="checkbox"/> SINGLE PHASED	FREE LIQUIDS <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO VOLUME %
------------------------------	-----------------------	---	---	--	---

Test	As Received	Extraction Procedure	Date of Analysis	Test	As Received	Extraction Procedure	Date of Analysis
Specific Gravity	<u>1.37</u>						
pH	<u>N/A</u>						
Acidity % as							
Alkalinity % as				Phenols, mg/l			
CO ₂ mg/l				Cyanides, as CN Total mg/l	<u><10</u>		
BOD ₅ mg/l				Cyanides, as CN Free mg/l			
Total Solids @ 105°C	<u>64.76%</u>						
Total Dissolved Solids mg/l				Nitrogen Ammonia, as N mg/l			
Residue on Evaporation @ 180°C				Total Kjeldahl Nitrogen as N mg/l			
<u>Water as H₂O</u>	<u>4.7%</u>						
Flash Point F°	<u>>212</u>			Total Alkalinity, P as CaCO ₃ , mg/l			
Ash Content, on Ignition (%)	<u>23.62%</u>			Total Alkalinity M as CaCO ₃ , mg/l			
Heating Value, BTU/lb	<u>1540</u>			Total Hardness as CaCO ₃ , mg/l			
Acid Scrub, % NaOH/g				Calcium Hardness, as CaCO ₃ mg/l			
<u>Aluminum as Al</u>	<u>2930</u>			Magnesium Hardness, as CaCO ₃ mg/l			
Arsenic, as As, mg/l	<u>7.07</u>						
Barium, as Ba, mg/l	<u>2620</u>						
Bromine as Br, mg/l				Oil and Grease, mg/l	<u>9%</u>	<u>23.67%</u>	
Cadmium, as Cd, mg/l	<u>98.7</u>						
Chromium, Total as Cr, mg/l	<u>1230</u>						
Hexavalent Chromium as Cr, mg/l				Aldrin, mg/l			
Copper, as Cu, mg/l	<u>2830</u>			Chlordane, mg/l			
Iron, Total as Fe, mg/l				DDT, mg/l			
Iron, dissolved, as Fe, mg/l				Dieldrin, mg/l			
Lead, as Pb, mg/l	<u>5070</u>			Endrin, mg/l			
Manganese, as Mn, mg/l				Heptachlor, mg/l			
Magnesium, as Mg, mg/l				Lindane, mg/l			
Mercury, as Hg, mg/l	<u>1500</u>			Methoxychlor, mg/l			
Nickel, as Ni, mg/l	<u>32.3</u>			Toxaphene, mg/l			
Selenium, as Se, mg/l	<u>50.00</u>			Parathion, mg/l			
Silver, as Ag, mg/l	<u>2.90</u>			2,4, D, mg/l			
Zinc, as Zn, mg/l	<u>1410</u>			2,4,5 TP (Silver), mg/l			
<u>Sulfur as S</u>	<u>4.51</u>			PCB's, mg/l	<u>Am: 11242</u>	<u>32300</u>	
<u>Carbonates as K</u>	<u>291</u>			<u>Solvents - 100% acetone</u>			
Carbonates, as HCO ₃ , mg/l				<u>Most Solids - Insoluble</u>			
Total Sulfur, mg/l	<u>4930</u>			<u>Sinks</u>			
Fluorides, as F, mg/l	<u>TOTAL 105000</u>						
Nitrites, as F, mg/l	<u>TOTAL 879</u>						
Nitrates, as NO ₃ , mg/l							

000278

P.F. - from (no free liq)

36002287 PROF: ENR
SCP/ENRAC EAST/RON MIS
NEWARK, NJ
SRCE: ENC SITE: INC ALA
SOLVENT SLUDGE/T5

04/23/86

010

Tech Center # 2287

WEIGHT & SOLVENTS

Trichlorofluoromethane	_____
Ethyl Ether	_____
Methanol	_____
1,1,2-Trichloro-1,2,2- trifluoroethane	_____
Ethanol	_____
Acetone	_____
Methylene Chloride	_____
Isopropanol	_____
Carbon Tetrachloride	_____
Ethyl Acetate	_____
Methyl Ethyl Ketone	<u>0.08</u>
1,1,1-Trichloroethane	_____
Benzene	_____
Trichloroethylene	_____
Isobutanol	_____
N-Butanol	_____
Toluene	<u>0.4</u>
2-Ethoxyethanol	_____

Methyl Isobutyl Ketone	_____
Tetrachloroethylene	<u>1</u>
Butyl Acetate	_____
Ethylbenzene	<u>0.04</u>
Xylenes	<u>0.2</u>
Styrene	_____
2-Ethoxyethanol Acetate	_____
2-Butoxyethanol	_____
Cyclohexanone	_____
Chlorobenzene	_____
o-Dichlorobenzene	<u>0.1</u>
Hydrocarbons (C ₁₀₋₂₀)	<u>2</u>
High-boiling organics (B.P. > 290°C)	<u>2.67</u> <u>5/9/86</u>
Other Solvents:	_____

Detection limit for individual components is approximately 0.1% by weight.

A Blank = Not Detected.

Sample Prep 2.25g + 2.26g CS

Comments _____

000279



SPECIAL WASTE ANALYSIS REPORT

This Report is intended for the sole use and benefit of Waste Management and its companies. No representation concerning significance of the reported data is made to any other person or entity.



WASTE PROFILE SHEET CODE

FROM SAMPLE CONTAINER

LABORATORY NAME: Chemical Waste Management 86002286 PROF: ENR 04/23/86
ADDRESS: Technical Center SCP/ENRAC EAST/CON MIS
DATE SAMPLE RECEIVED AT LAB: NEWARK, NJ SRCE: ENC SITE: INC ALA 007
LAB SAMPLE NUMBER ASSIGNED: SOLVENT SLUDGE/T08

CERTIFICATION Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision, using sample preparation and analytical methods and analytical equipment specified or approved in the most recent "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," SW 846, USEPA Office of Solid Waste. This laboratory follows a quality assurance/control program, including a sample chain of custody procedure.

DATE OF REPORT: 5/9/86

SIGNATURE: J. E. Tucker

LAB MANAGER NAME: _____

PHYSICAL CHARACTERISTICS OF WASTE

Incidental

AMPLE VOLUME: 1 qt. COLOR: Dark Brown liquid ODOR: ☐ NONE ☒ MILD ☐ STRONG PHYSICAL STATE @ 70°F: ☒ SOLID ☐ SEMI-SOLID ☐ LIQUID ☐ POWDER LAYERS: ☒ MULTILAYERED ☐ BILAYERED ☐ SINGLE PHASED FREE LIQUIDS: ☒ YES ☐ NO VOLUME: 32%

Test	As Received	Extraction Procedure	Date of Analysis	Test	As Received	Extraction Procedure	Date of Analysis
Specific Gravity	1.07						
idity % as	4.0						
etlinity % as				Phenols, mg/l			
OD				Cyanides, as CN Total mg/l	210		
OD				Cyanides, as CN Free mg/l			
tal Solids @ 105°C	36.49%						
tal Dissolved Solids mg/l				Nitrogen Ammonia, as N mg/l			
sidue on Evaporation @ 180°C				Total Kjeldahl Nitrogen as N mg/l			
Water @ 100°C	5.1%						
ash Point F°	221.2			Total Alkalinity, P as CaCO ₃ mg/l			
h Content, on Ignition (%)	59.2%			Total Alkalinity M as CaCO ₃ mg/l			
ating Value, BTU/lb	9418			Total Hardness as CaCO ₃ mg/l			
cid Scrub, % NaOH/g				Calcium Hardness, as CaCO ₃ mg/l			
umina - as Al	1080			Magnesium Hardness, as CaCO ₃ mg/l			
enic, as As, mg/l	1.11						
rium, as Ba, mg/l	434						
mium as Br, mg/l				Oil and Grease, mg/l	7.13.89		
dmium, as Cd, mg/l	93.9						
romium, Total as Cr, mg/l	943						
avalent Chromium as Cr, mg/l				Aldrin, mg/l			
pper, as Cu, mg/l	148			Chlordane, mg/l			
n, Total as Fe, mg/l				DDT, mg/l			
n, dissolved, as Fe, mg/l				Dieldrin, mg/l			
id, as Pb, mg/l	3750			Endrin, mg/l			
nganese, as Mn, mg/l				Heptachlor, mg/l			
gnesium, as Mg, mg/l				Lindane, mg/l			
rcury, as Hg, mg/l	0.026			Methoxychlor, mg/l			
hel, as Ni, mg/l	45.9			Toxaphene, mg/l			
enium, as Se, mg/l	5.91			Parathion, mg/l			
ver, as Ag, mg/l	20.15			2,4, D, mg/l			000280
c, as As, mg/l	413			2, 4, 5 TP (Silvex), mg/l			
as, as Be, mg/l	2.26			PCB's, mg/l	Archer 12.3.8		
to, as As, mg/l	1.44			as, as Br, mg/l	as, as Br, mg/l		
arbonates, as HCO ₃ mg/l				as, as Br, mg/l	as, as Br, mg/l		
otal Sulfur, mg/l	2160			as, as Br, mg/l	as, as Br, mg/l		
orides, as Cl, mg/l	36.200			as, as Br, mg/l	as, as Br, mg/l		
urides, as F, mg/l	569			as, as Br, mg/l	as, as Br, mg/l		
ates, as NO ₃ mg/l				as, as Br, mg/l	as, as Br, mg/l		

86002286 PROF: ENR
SCP/ENRAC EAST/RON MIS
NEWARK, NJ
SRCE: ENC SITE: INC ALA
SOLVENT SLUDGE/TAS

04/23/86

007

Tech Center # 2286

WEIGHT & SOLVENTS

Trichlorofluoromethane	_____
Ethyl Ether	_____
Methanol	_____
1,1,2-Trichloro-1,2,2-	_____
trifluoroethane	_____
Ethanol	_____
Acetone	<u>0.4</u>
Methylene Chloride	<u>0.8</u>
Isopropanol	_____
Carbon Tetrachloride	_____
Ethyl Acetate	<u>0.2</u>
Methyl Ethyl Ketone	<u>0.4</u>
1,1,1-Trichloroethane	_____
Benzene	_____
Trichloroethylene	_____
Isobutanol	_____
N-Butanol	<u>0.1</u>
Toluene	<u>1</u>
2-Ethoxyethanol	_____

Methyl Isobutyl Ketone	<u>0.2</u>
Tetrachloroethylene	_____
Butyl Acetate	<u>0.1</u>
Ethylbenzene	<u>0.1</u>
Xylenes	<u>0.5</u>
Styrene	_____
2-Ethoxyethanol Acetate	_____
2-Butoxyethanol	_____
Cyclohexanone	_____
Chlorobenzene	_____
o-Dichlorobenzene	_____
Hydrocarbons (C ₇₋₁₆)	<u>2</u>
High-boiling organics (B.P. > 290°C)	_____
Other Solvents:	_____
C ₃ -Benzene	<u>0.2</u>
_____	_____
_____	_____
_____	_____

Detection limit for individual components is approximately 0.1% by weight.

A Blank = Not Detected.

000281

Sample Prep 6.835 + 6.965 CS

Comments _____

SPECIAL WASTE ANALYSIS REPORT

This Report is intended for the sole use and benefit of Waste Management and its companies. No representation concerning significance of the reported data is made to any other person or entity.



WASTE PROFILE SHEET CODE



FROM SAMPLE CONTAINER

LABORATORY NAME: Chemical Waste Management

ADDRESS: 1001A Technical Center

DATE SAMPLE RECEIVED AT LAB:

LAB SAMPLE NUMBER ASSIGNED:

86002285 PROF: ENR

SCP/ENRAC EAST/CON MIS
NEWARK, NJ

04/23/86

SRCE: ENC SITE: INC ALA

004

SOLVENT SLUDGE/T15

CERTIFICATION Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision, using sample preparation and analytical equipment specified or approved in the most recent "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," SW 846, USEPA Office of Solid Waste. This laboratory follows a quality assurance control program, including a sample chain of custody procedure.

DATE OF REPORT:

SIGNATURE:

LAB MANAGER NAME:

101. E. Tuck

PHYSICAL CHARACTERISTICS OF WASTE

Incidental

AMPLE VOLUME	COLOR Dark Brown sig Black Solids	ODOR: <input type="checkbox"/> NONE <input checked="" type="checkbox"/> MILD <input type="checkbox"/> STRONG	PHYSICAL STATE @ 70°F <input checked="" type="checkbox"/> SOLID <input type="checkbox"/> SEMI-SOLID <input checked="" type="checkbox"/> LIQUID <input type="checkbox"/> POWDER	LAYERS <input type="checkbox"/> MULTILAYERED <input checked="" type="checkbox"/> B-LAYERED <input type="checkbox"/> SINGLE PHASED	FREE LIQUIDS <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO VOLUME 40%
--------------	---	---	--	--	---

Test	As Received	Extraction Procedure	Date of Analysis	Test	As Received	Extraction Procedure	Date of Analysis
Specific Gravity	0.916						
	N/A						
Moisture % as				Phenols, mg/l			
Salinity % as				Cyanides, as CN Total mg/l	210		
Oil %				Cyanides, as CN Free mg/l			
Total Solids @ 105°C	60.43%			Nitrogen Ammonia, as N mg/l			
Total Dissolved Solids mg/l				Total Kjeldahl Nitrogen as N mg/l			
Residue on Evaporation @ 180°C							
Water as H ₂ O	6.32%			Total Alkalinity, P as CaCO ₃ , mg/l			
Flash Point F°	270			Total Alkalinity M as CaCO ₃ , mg/l			
Heat Content, on Ignition (Btu/lb)	4687			Total Hardness as CaCO ₃ , mg/l			
Heating Value, BTU/lb	3462			Calcium Hardness, as CaCO ₃ , mg/l			
Acid Scrub. % NaOH/mg	1.5			Magnesium Hardness, as CaCO ₃ , mg/l			
Mercury, as Hg, mg/l	6.28						
Antimony, as Sb, mg/l	1.35						
Barium, as Ba, mg/l	570			Oil and Grease, mg/l %	28.14%		
Bismuth, as Bi, mg/l							
Cadmium, as Cd, mg/l	52.4						
Chromium, Total as Cr, mg/l	540						
Sixvalent Chromium as Cr, mg/l				Aldrin, mg/l			
Copper, as Cu, mg/l	187			Chlordane, mg/l			
Iron, Total as Fe, mg/l				DDT, mg/l			
Lithium, dissolved, as Fe, mg/l				Dieldrin, mg/l			
Lead, as Pb, mg/l	1840			Endrin, mg/l			
Manganese, as Mn, mg/l				Heptachlor, mg/l			
Magnesium, as Mg, mg/l				Lindane, mg/l			
Mercury, as Hg, mg/l	384			Methoxychlor, mg/l			
Nickel, as Ni, mg/l	25.1			Toxaphene, mg/l			
Selenium, as Se, mg/l	3.00			Parathion, mg/l			
Silver, as Ag, mg/l	40.15			2,4-D, mg/l			
Sulfur, as S, mg/l	289			2,4,5-TP (Silvex), mg/l			
Titanium, as Ti, mg/l	1.38			PCB's, mg/l TOTAL	191		
Vanadium, as V, mg/l	92.7			PCB's, mg/l Arochlor 1242	76		
Carbonates, as HCO ₃ , mg/l				Both Bayliss - Unavailable			
Total Sulfur, mg/l	2763						
Chlorides, as Cl, mg/l TOTAL	13600						
Fluorides, as F, mg/l TOTAL	87						
Nitrites, as NO ₂ , mg/l							

000282

86042285 PROF. ENR
 SCP/ENRAC EAST/ROM MIS
 NEWARK, NJ
 SRCE: ENC SITE: INC ALA
 SOLVENT SLUDGE/T15

04/23/86

004

Tech Center # _____

WEIGHT % SOLVENTS

Trichlorofluoromethane	_____
Ethyl Ether	_____
Methanol	_____
1,1,2-Trichloro-1,2,2-	_____
trifluoroethane	_____
Ethanol	_____
Acetone	<u>0.3</u>
Methylene Chloride	<u>2</u>
Isopropanol	_____
Carbon Tetrachloride	_____
Ethyl Acetate	_____
Methyl Ethyl Ketone	<u>1</u>
1,1,1-Trichloroethane	_____
Benzene	<u>0.05</u>
Trichloroethylene	_____
Isobutanol	_____
N-Butanol	<u>0.1</u>
Toluene	<u>2</u>
2-Ethoxyethanol	_____

Methyl Isobutyl Ketone	<u>0.4</u>
Tetrachloroethylene	<u>0.2</u>
Butyl Acetate	<u>0.1</u>
Ethylbenzene	<u>0.3</u>
Xylenes	<u>1</u>
Styrene	_____
2-Ethoxyethanol Acetate	_____
2-Butoxyethanol	_____
Cyclohexanone	_____
Chlorobenzene	_____
o-Dichlorobenzene	_____
Hydrocarbons (C ₇ -20)	<u>5</u>
High-boiling organics (B.P. > 290°C)	<u>0.5</u>

Other Solvents:

Methyl ethyl acetate 0.1
 C₃ Benzenes 1
 Benzene, methanol 0.2
 Phenol 0.05
 Isophenol 0.1
 Naphthalene 0.03
 Benzene 2,4-dichloro-1-chloromethyl 0.2
 Benzene acetic acid 0.2

Detection limit for individual components is approximately 0.1% by weight.

A Blank = Not Detected.

000283

Sample Prep 3.69g + 3.69g CS-

Comments _____

SPECIAL WASTE ANALYSIS REPORT

This Report is intended for the sole use and benefit of Waste Management and its companies. No other benefit or significance of the reported data is made to any other person or entity.



WASTE PROFILE SHEET CODE

FROM SAMPLE CONTAINER

LABORATORY NAME: Chemical Waste Management 86002284 PROJ: ENR
Technical Center SCP/ENRAC EAST/CON MIS
NEWARK, NJ 04/23/86
SRCE: END SITE: INC ALA
SOLVENT SLUDGE/TSE 001

DATE SAMPLE RECEIVED AT LAB: _____
 LAB SAMPLE NUMBER ASSIGNED: _____

CERTIFICATION: Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision, using sample preparation and analytical equipment specified or approved in the most recent "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," SW 846, USEPA Office of Solid Waste. This laboratory follows a quality assurance control program, including a sample chain of custody procedure.

DATE OF REPORT: 5/9/86 SIGNATURE: D. E. Tucker

LAB MANAGER NAME: _____

PHYSICAL CHARACTERISTICS OF WASTE

Incidental

ODOR: ☐ NONE ☒ MILD ☐ STRONG

PHYSICAL STATE @ 70°F: ☒ SOLID ☐ SEMI-SOLID ☐ LIQUID ☐ POWDER

LAYERS: ☐ MULTILAYERED ☒ BI-LAYERED ☐ SINGLE PHASED

FREE LIQUIDS: ☒ YES ☐ NO

VOLUME: 80%

DESCRIBE: Solv.

Test	As Received	Extraction Procedure	Date of Analysis	Test	As Received	Extraction Procedure	Date of Analysis
Density	1.02						
10% Solution	6.0						
Acidity % as							
Alkalinity % as				Phenols, mg/l			
O.D. mg/l				Cyanides, as CN Total mg/l	415		
O.I.				Cyanides, as CN Free mg/l			
Total Solids @ 105°C	88.46%						
Total Dissolved Solids mg/l				Nitrogen Ammonia, as N mg/l			
Residue on Evaporation @ 180°C				Total Kjeldahl Nitrogen as N mg/l			
Water as H ₂ O %	41.9%						
ash Total F	270			Total Alkalinity, P as CaCO ₃ mg/l			
ash Content, on Ignition %	0.49%			Total Alkalinity M as CaCO ₃ mg/l			
Heating Value, BTU/lb	12406			Total Hardness as CaCO ₃ mg/l			
Calc. Solub. as NaOH %	2.5%			Calcium Hardness, as CaCO ₃ mg/l			
Calc. Solub. as HCl %	16.1			Magnesium Hardness, as CaCO ₃ mg/l			
As, as As, mg/l	0.20						
As, as Ba, mg/l	4.41						
As, as Br, mg/l				Oil and Grease, mg/l	57.9%		
As, as Cd, mg/l	1.19						
As, as Cr, mg/l	39.3						
As, as Cr, mg/l				Aldrin, mg/l			
As, as Cu, mg/l	11.6			Chlordane, mg/l			
As, as Fe, mg/l				DDT, mg/l			
As, as Fe, mg/l				Dieldrin, mg/l			
As, as Pb, mg/l	45.4			Endrin, mg/l			
As, as Mn, mg/l				Heptachlor, mg/l			
As, as Mg, mg/l				Lindane, mg/l			
As, as Hg, mg/l	0.035%			Methoxychlor, mg/l			
As, as Ni, mg/l	3.72			Toxaphene, mg/l			
As, as Se, mg/l	10.0			Parathion, mg/l			
As, as Ag, mg/l	40.15			2,4, D, mg/l			
As, as	10.8			2,4,5-TP (toxaphene), mg/l			
As, as	0.20			PCB's, mg/l TOTAL	7570		
As, as	9.20			PCB's, mg/l	1254		
Carbonates, as HCO ₃ mg/l				Dieldrin, mg/l			
Total Sulfur, mg/l	1270			Solids - Soluble			
Fluorides, as Cl, mg/l	TOTAL 59.20						
Oxides, as F, mg/l	TOTAL 9.3			Sodium as Na	45%		
Nitrates, as NO ₃ mg/l				Antimony as Sb	21.2		
Nitrite, as NO ₂ mg/l				Thallium as Tl	41.0		

86002284 PROF: ENR
SCP/ENRAC EAST/ROM MIS
NEWARK, NJ
SRCE: ENC SITE: INC ALA
SOLVENT SLUDGE/T56

04/23/86

Tech Center # 2284

001

WEIGHT & SOLVENTS

Trichlorofluoromethane	_____
Ethyl Ether	_____
Methanol	_____
1,1,2-Trichloro-1,2,2-trifluoroethane	_____
Ethanol	_____
Acetone	_____
Methylene Chloride	_____
Isopropanol	_____
Carbon Tetrachloride	_____
Ethyl Acetate	_____
Methyl Ethyl Ketone	<u>1</u>
1,1,1-Trichloroethane	_____
Benzene	_____
Trichloroethylene	_____
Isobutanol	_____
N-Butanol	<u>0.1</u>
Toluene	<u>2</u>
2-Ethoxyethanol	<u>0.4</u>

Methyl Isobutyl Ketone	<u>0.7</u>
Tetrachloroethylene	_____
Butyl Acetate	<u>0.4</u>
Ethylbenzene	<u>0.5</u>
Xylenes	<u>3</u>
Styrene	_____
2-Ethoxyethanol Acetate	<u>0</u>
2-Butoxyethanol	_____
Cyclohexanone	_____
Chlorobenzene	_____
o-Dichlorobenzene	_____
Hydrocarbons C ₇₋₁₆	<u>3</u>
High-boiling organics (B.P. > 290°C)	<u>0.6</u>

Other Solvents:

2-methoxyethanol	<u>0.4</u>
Phenol 0.3	
C ₃ Benzene	<u>0.7</u>
C ₄ Benzene	<u>0.4</u>
C ₅ Benzene	<u>0.3</u>
Trichlorobenzene	<u>1</u>
Isophenol	<u>0.2</u>
Naphthalene	<u>0.03</u>
Ethanol, 1,2- [2-(2-methoxyethoxy)ethoxy]	<u>0.6</u>

Detection limit for individual components is approximately 0.1% by weight.

A Blank = Not Detected.

Sample Prep 3.09g + 3.09g CS₂

Comments _____

000285

USEPA Region II Lab

COMPLETED ANALYSIS REPORT

REPORT DATE: 86/05/23

PROJECT NO: 691

PROJECT NAME: SCP-CARLSTADT, N. J.

EXPLANATIONS OF REMARK CODES

REMARK CODE	EXPLANATION
B	RESULTS BASED UPON COLONY COUNTS OUTSIDE ACCEPTABLE RANGE
J	ESTIMATED VALUE
K	ACTUAL VALUE KNOWN TO BE LESS THAN VALUE GIVEN
L	ACTUAL VALUE KNOWN TO BE GREATER THAN VALUE GIVEN
M	PRESENCE OF MATERIAL VERIFIED BUT NOT QUANTIFIED
O	SAMPLED BUT NOT ANALYZED DUE TO LAB ACCIDENT
T	REPORTED VALUE LESS THAN CRITERIA OF DETECTION
U	MATERIAL ANALYZED FOR, BUT NOT DETECTED

LOCATION CODES FOR IDENTIFICATION OF SAMPLING POINTS AT INDUSTRIAL /
SANITARY FACILITIES, LANDFILLS, HAZARDOUS WASTE SITES.

CODE NUMBERS	SAMPLING POINTS
1001 - 1050	EFFLUENT PIPE NUMBER 001 TO 050
1051 - 1099	OTHER EFFLUENTS SUCH AS COOLING TOWER DISCHARGE, DISCHARGE FROM HOLDING PONDS, ETC...
1100 - 1249	IN PLANT SAMPLES - DURING PROCESS
1250 - 1274	IN PLANT SAMPLES AFTER PROCESS AND BEFORE TREATMENT OR DISCHARGE
1275 - 1424	IN PLANT SAMPLES - DURING TREATMENT
1435 - 1454	SEPARATE INFLUENT POINTS/WATER SOURCES
15XX	INFLUENT ASSOCIATED WITH EFFLUENT 10XX
2000	BLANK FOR VOLATILE ORGANICS
2XXX	AUTO SAMPLER BLANK AT SAMPLE POSITION 1XXX
3000 - 3099	GROUND WATER FROM WELL 01 TO 99
3100 - 3199	BEDIMENT SAMPLE (WATER BOTTOM)
3200 - 3299	SOIL SAMPLE
3300 - 3399	STREAM WATER SAMPLE
3400 - 3499	LAGOON SAMPLE
3500 - 3599	STORAGE TANK SAMPLE
3600 - 3699	LEACHATE SAMPLE
3700 - 3799	OTHER TYPE SAMPLE

COMPLETED ANALYSIS REPORT

REPORT DATE: 86/05/23

PROJECT NO: 691

PROJECT NAME: BCP-CARLESTADT, N. J.

STATION NO	DATE FROM TO	TIME OF DAY	LABNO	PARN	PARAMETER NAME	UNITS	CHEMISTRY	VALUE & REMARK
T-56	86/04/18	1030						
LOCATION CODE: 3700 SUBSTRATE: SLUDGE								
DESCRIPTION: SOLID/SEMI-SOLID ABOVE GROUND TANK								
SAMPLE TANKER T-56								
			088526	99922	PCB-1016	M	UG/KG	5000 K
				99923	PCB-1221	M	UG/KG	5000 K
				99924	PCB-1232	M	UG/KG	5000 K
				99925	PCB-1242	M	UG/KG	5000 K
				99926	PCB-1248	M	UG/KG	5000 K
				99927	PCB-1254	M	UG/KG	5000 K
				99928	PCB-1260	M	UG/KG	8430000 K
T-15	86/04/18	1155						
LOCATION CODE: 3700 SUBSTRATE: SLUDGE								
DESCRIPTION: SOLID/SEMI-SOLID ABOVE GROUND TANK								
SAMPLE T-15 BOTTOM SAMPLE								
			088527	99922	PCB-1016	M	UG/KG	62500 K
				99923	PCB-1221	M	UG/KG	62500 K
				99924	PCB-1232	M	UG/KG	62500 K
				99925	PCB-1242	M	UG/KG	62500 K
				99926	PCB-1248	M	UG/KG	62500 K
				99927	PCB-1254	M	UG/KG	62500 K
				99928	PCB-1260	M	UG/KG	62500 K
T-15	86/04/18	1155						
LOCATION CODE: 3700 SUBSTRATE: SLUDGE								
DESCRIPTION: SOLID/SEMI-SOLID ABOVE GROUND TANK								
SAMPLE COMPOSITE T-15								
			088528	99922	PCB-1016	M	UG/KG	62500 K
				99923	PCB-1221	M	UG/KG	62500 K
				99924	PCB-1232	M	UG/KG	62500 K
				99925	PCB-1242	M	UG/KG	62500 K
				99926	PCB-1248	M	UG/KG	62500 K
				99927	PCB-1254	M	UG/KG	62500 K
				99928	PCB-1260	M	UG/KG	62500 K
T-8	86/04/18	1330						
LOCATION CODE: 3700 SUBSTRATE: SLUDGE								
DESCRIPTION: SOLID/SEMI-SOLID ABOVE GROUND TANK								
SAMPLE TANK T-8 BOTTOM								
			088529	99922	PCB-1016	M	UG/KG	62500 K
				99923	PCB-1221	M	UG/KG	62500 K
				99924	PCB-1232	M	UG/KG	62500 K
				99925	PCB-1242	M	UG/KG	62500 K
				99926	PCB-1248	M	UG/KG	62500 K

000287

COMPLETED ANALYSIS REPORT

REPORT DATE: 86/09/23

PROJECT NO: 691

PROJECT NAME: SCP-CARLSTADT, N. J.

STATION NO	DATE FROM TO	TIME OF DAY	LABNO	PARN	PARAMETER NAME	UNITS	CHEMISTRY	VALUE & REMARK
------------	--------------	-------------	-------	------	----------------	-------	-----------	----------------

T-8 86/04/18 1330
 LOCATION CODE: 3700 SUBSTRATE: SLUDGE
 DESCRIPTION: SOLID/SEMI-SOLID ABOVE GROUND TANK
 SAMPLE TANK T-8 COMPOSITE

088529	99927	PCB-1254	M	UQ/KQ	62500	K
	99928	PCB-1260	M	UQ/KQ	1990000	
088530	99922	PCB-1016	M	UQ/KQ	5000	K
	99923	PCB-1221	M	UQ/KQ	5000	K
	99924	PCB-1232	M	UQ/KQ	5000	K
	99925	PCB-1242	M	UQ/KQ	5000	K
	99926	PCB-1248	M	UQ/KQ	5000	K
	99927	PCB-1254	M	UQ/KQ	5000	K
	99928	PCB-1260	M	UQ/KQ	24200000	

T-5 86/04/18 1420
 LOCATION CODE: 3700 SUBSTRATE: SLUDGE
 DESCRIPTION: SOLID/SEMI-SOLID ABOVE GROUND TANK
 SAMPLE T-5 COMPOSITE

088531	99922	PCB-1016	M	UQ/KQ	62500	K
	99923	PCB-1221	M	UQ/KQ	62500	K
	99924	PCB-1232	M	UQ/KQ	62500	K
	99925	PCB-1242	M	UQ/KQ	62500	K
	99926	PCB-1248	M	UQ/KQ	62500	K
	99927	PCB-1254	M	UQ/KQ	62500	K
	99928	PCB-1260	M	UQ/KQ	170725000	

T-4 86/04/18 1530
 LOCATION CODE: 3700 SUBSTRATE: SLUDGE
 DESCRIPTION: SOLID/SEMI-SOLID ABOVE GROUND TANK
 SAMPLE TANK T-4 BOTTOM

088532	99922	PCB-1016	M	UQ/KQ	5000	K
	99923	PCB-1221	M	UQ/KQ	5000	K
	99924	PCB-1232	M	UQ/KQ	5000	K
	99925	PCB-1242	M	UQ/KQ	5000	K
	99926	PCB-1248	M	UQ/KQ	5920000	
	99927	PCB-1254	M	UQ/KQ	5000	K
	99928	PCB-1260	M	UQ/KQ	5000	K

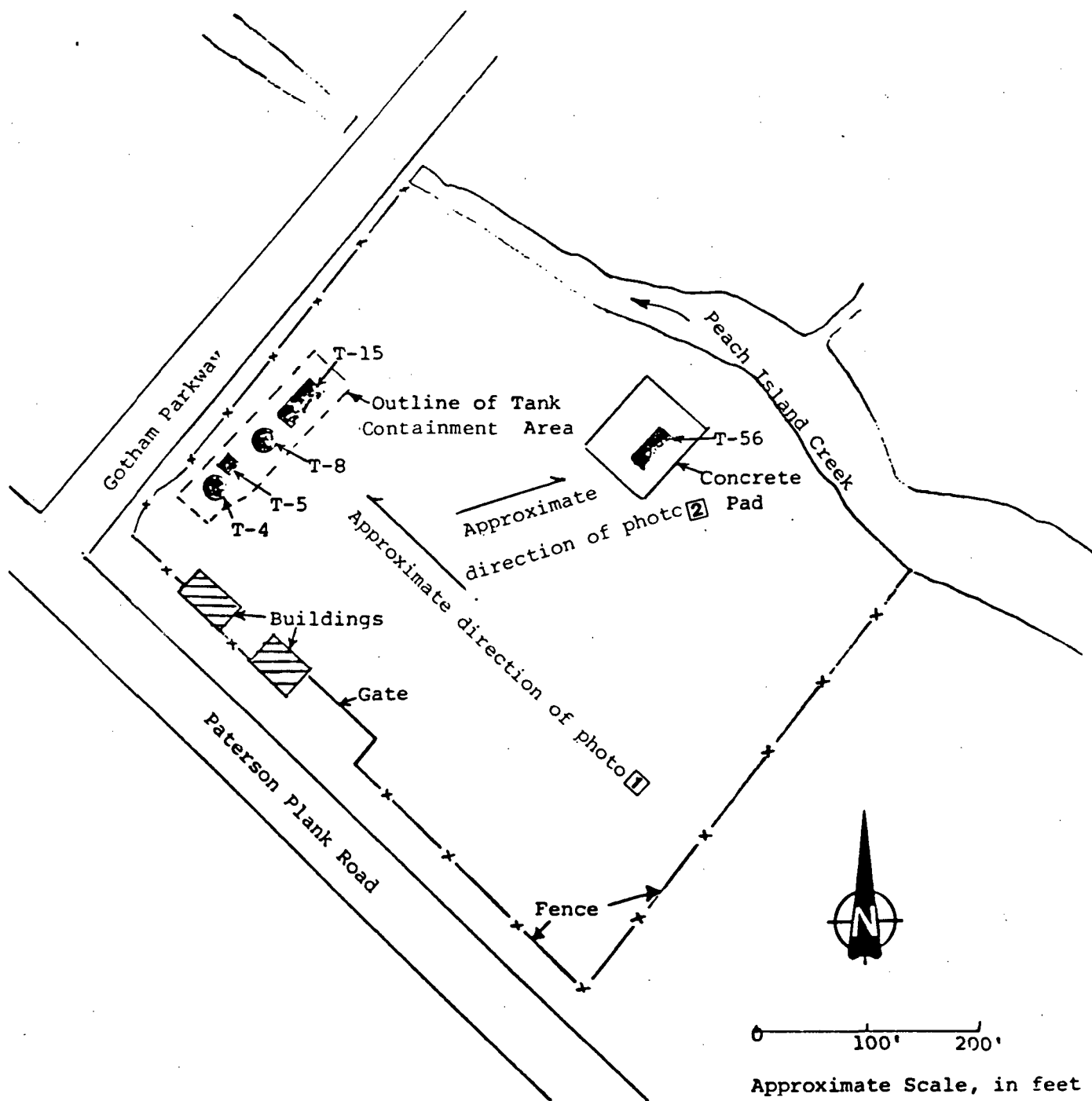
***** END OF PROJECT *****

000288

APPENDIX 2

SITE PHOTOGRAPHS

000289



Notes;

- 1) Tank locations are approximate and not to scale.
- 2) Base map reference: aerial photograph no. 3818-6-35, March 27, 1984. Scale 1"=100'



SPILL PREVENTION &
EMERGENCY RESPONSE DIVISION

EPA PM

R. Harris

In association with
ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.

TAT PM

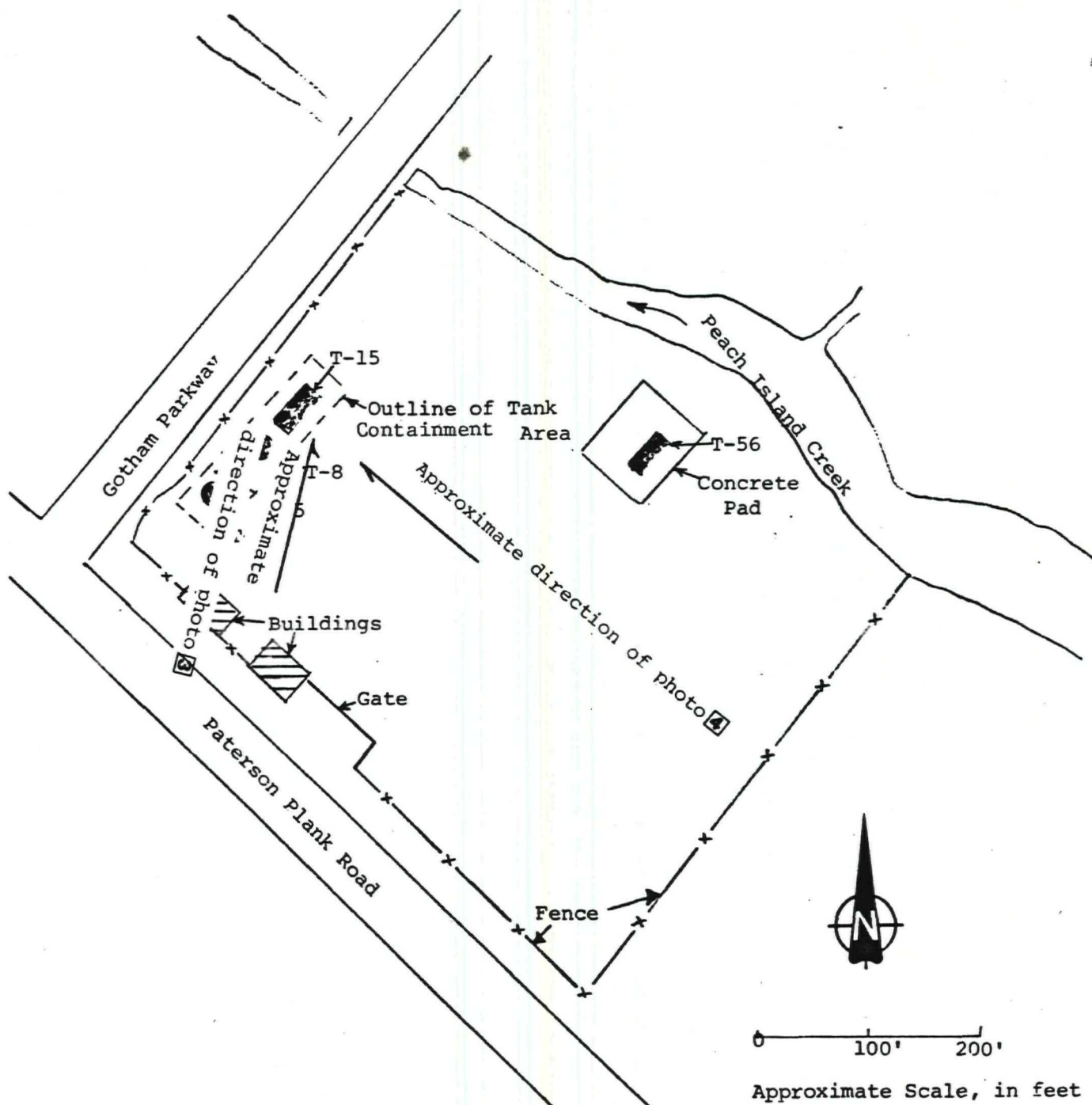
J. M. Simonsen



PHOTO # 1: Carlstadt site, looking to the northwest. From left to right are tanks T-4, T-5, T-8, and T-15.



PHOTO # 2: Tank T-56, view is to the northeast.



Notes;

- 1) Tank locations are approximate and not to scale.
- 2) Base map reference: aerial photograph no. 3818-6-35, March 27, 1984. Scale 1"=100'



SPILL PREVENTION &
EMERGENCY RESPONSE DIVISION

EPA PM

R. Harris

TAT PM

J. M. Simonsen

In association with
ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.

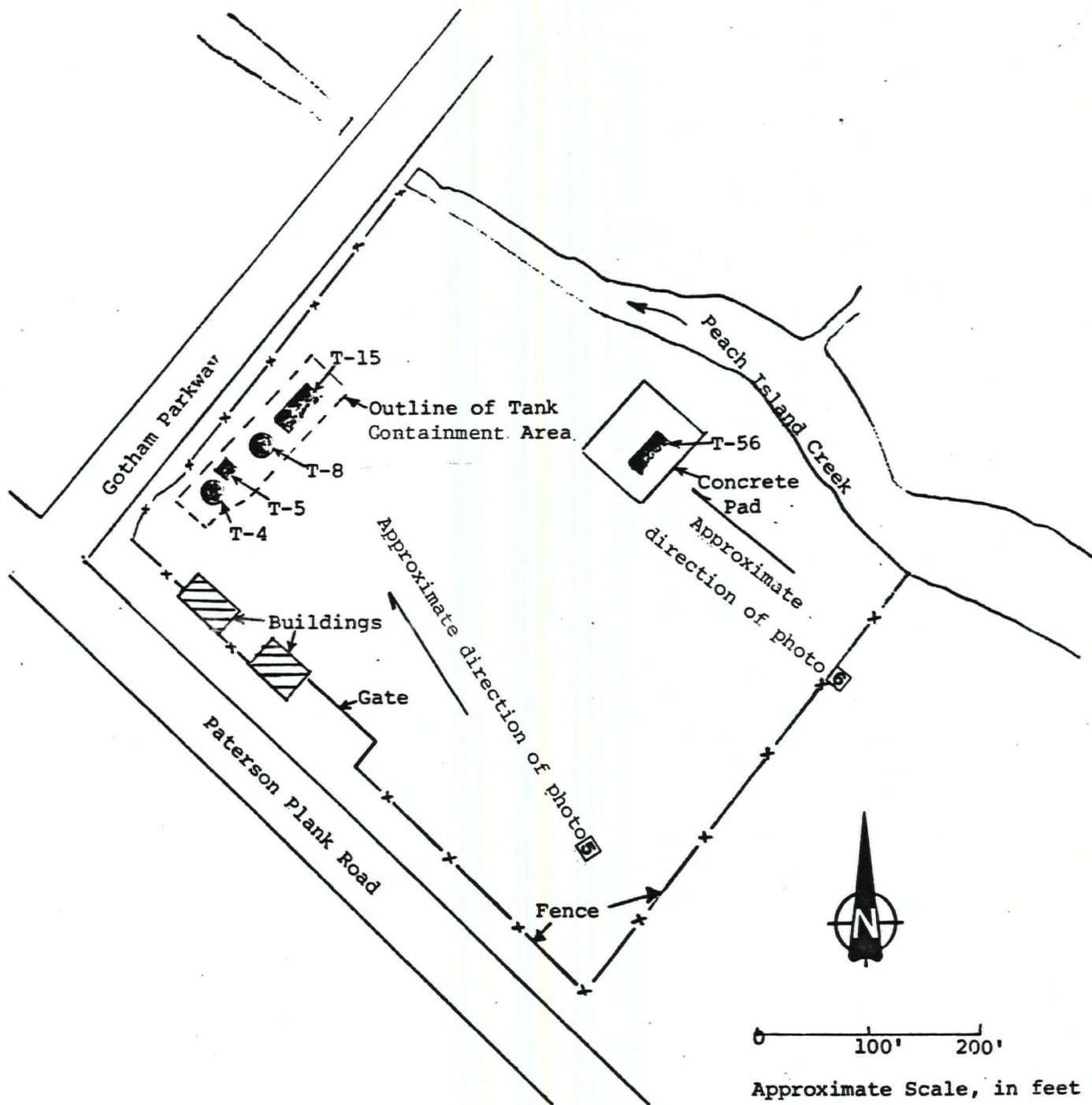
000291



PHOTO # 3: Offloading of liquids from T-15 by vac-truck



PHOTO # 4: T-15 sludge being removed by back-hoe.
Note the hopper just below the back-hoe bucket.



Notes;

- 1) Tank locations are approximate and not to scale.
- 2) Base map reference: aerial photograph no. 3818-6-35, March 27, 1984. Scale 1"=100'



SPILL PREVENTION &
EMERGENCY RESPONSE DIVISION

EPA PM

R. Harris

In association with
ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.

TAT PM

J. M. Simonsen

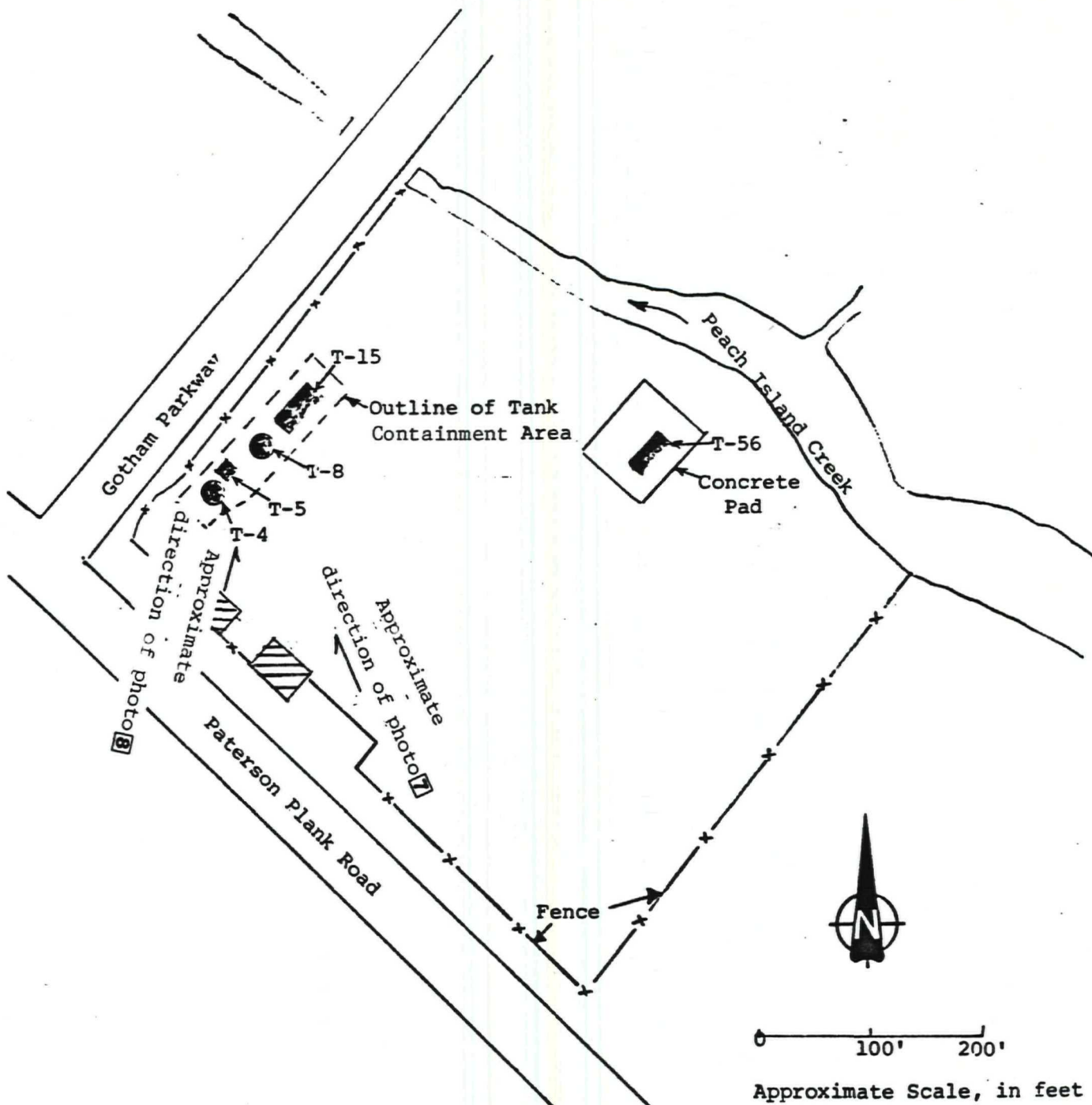
000293



PHOTO # 5: Workers inspecting T-4 drums for stabilization.



PHOTO # 6: Tank T-56 sludge being removed by back-hoe.



Notes;

- 1) Tank locations are approximate and not to scale.
- 2) Base map reference: aerial photograph no. 3818-6-35, March 27, 1984. Scale 1"=100'



SPILL PREVENTION &
EMERGENCY RESPONSE DIVISION

In association with
ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.

EPA PM

R. Harris

TAT PM

J. M. Simonsen

000295

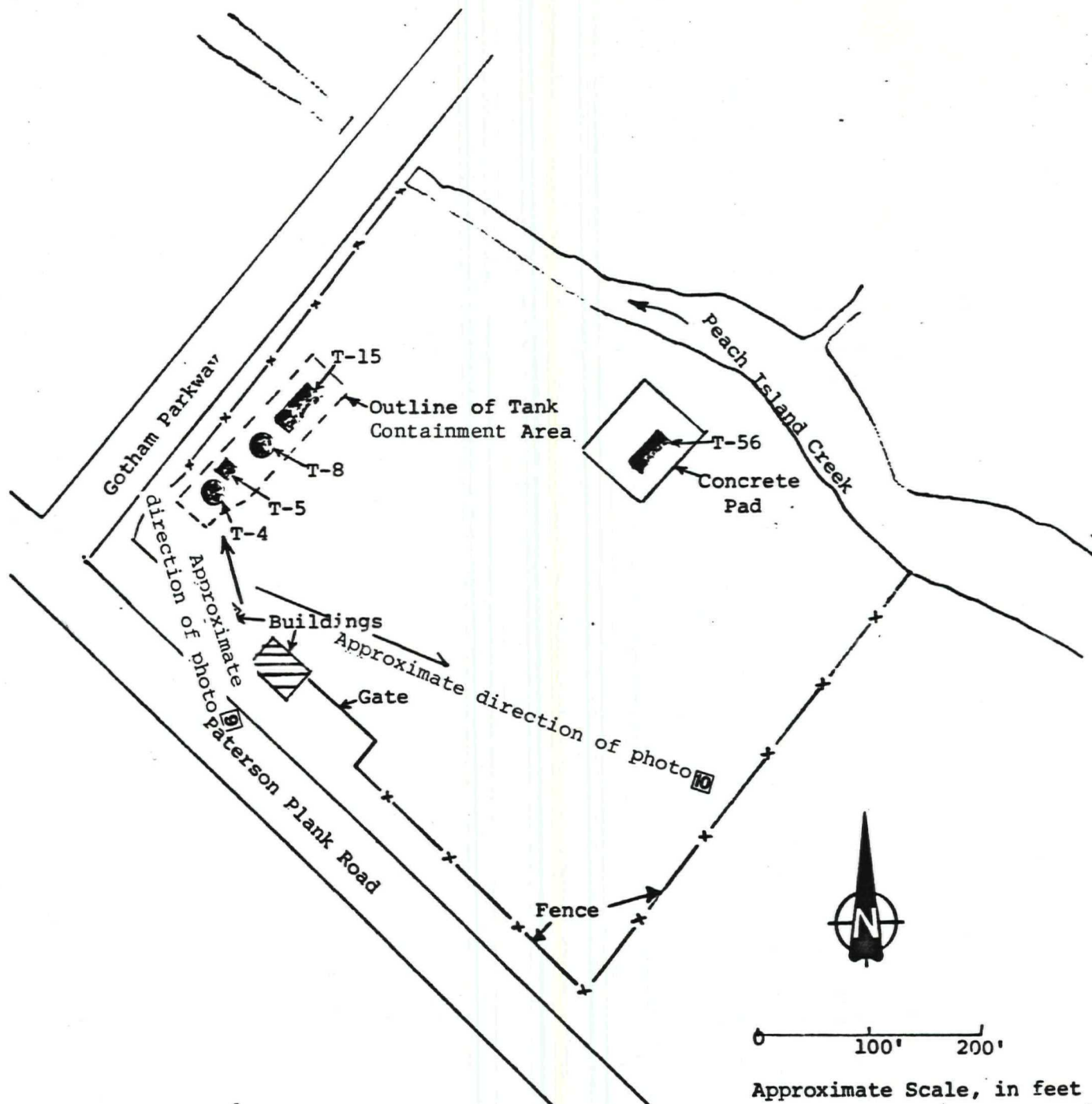


PHOTO # 7: One of the covered roll-offs used for storage of low level solid wastes.



PHOTO # 8: Decontamination of tank parts, using T-15 as a catch basin. Note previously decontaminated tank parts resting on plastic in foreground.

000296



Notes;

- 1) Tank locations are approximate and not to scale.
- 2) Base map reference: aerial photograph no. 3818-6-35, March 27, 1984. Scale 1"=100'



SPILL PREVENTION &
EMERGENCY RESPONSE DIVISION

EPA PM

R. Harris

In association with
ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.

TAT PM

J. M. Simonsen

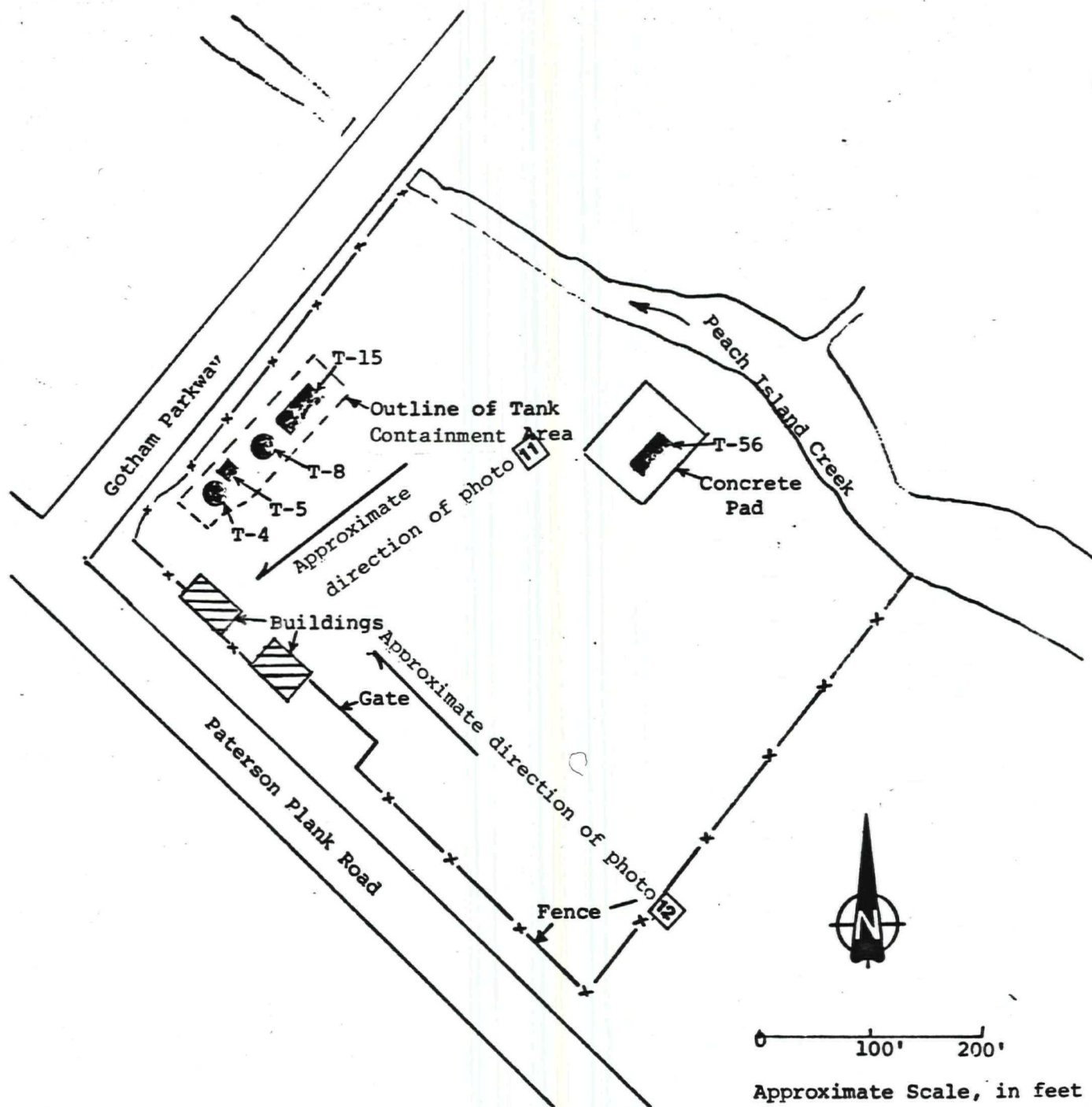
000297



PHOTO # 9: Tank T-4 after decontamination, showing typical effectiveness of decontamination procedure. After this, cutting of the tank continued.



PHOTO # 10: Tank parts being loaded by scrap dealer for removal.



Notes;

- 1) Tank locations are approximate and not to scale.
- 2) Base map reference: aerial photograph no. 3818-6-35, March 27, 1984. Scale 1"=100'



SPILL PREVENTION &
EMERGENCY RESPONSE DIVISION

EPA PM

R. Harris

In association with
ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.

TAT PM

J. M. Simonsen

000299



PHOTO # 11: Spill which resulted when back of vac-truck was accidentally opened by worker. Vacuuming of spill is in progress.



PHOTO # 12: Background: soil contaminated from above spill being stored on, and under, plastic sheeting. Construction of berm in progress. This soil was later transferred to roll-offs (see photo 7). Foreground: decontamination pad.

APPENDIX 3
DISPOSAL SUMMARY

000301

APPENDIX 3SUMMARY OF DISPOSAL METHODS

<u>Material</u>	<u>PCB Level*</u>	<u>Container Type - Quantity</u>	<u>Disposal Method - Facility</u>
Sludge, T-4	15 ppm	55 gallon steel drums 344**	Landfilled - Emelle, Alabama
Sludge, T-8	4,650 ppm	3.5 gallon buckets 1,027	Incineration - Chicago, Illinois
Sludge, T-15	132 ppm	55 gallon steel drums 344**	Landfilled - Emelle, Alabama
Sludge, T-56	1,240 ppm	30 gallon drum plastic 92	Incineration - Chicago, Illinois
Low Level, Solid debris	Variable, (<500 ppm)	30 cu. yd. rolloffs 3	Landfilled - Model City, New York

*Based on Intec Lab results
all arochlor types combined

**Figure shows combined drum
count for T-4 and T-15, see text.

APPENDIX 4

POLREPS

000303

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

DATE: September 23, 1986

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 548-8730 - Commercial & FTS
24 Hour Emergency

TO: C. Daggett, EPA
J. Marshall, EPA
F. Rubel, EPA
J. Feldstein, EPA
M. Randol, EPA
ERD, Washington, D.C.
(E-Mail)
G. Zachos, EPA
J. Berkowitz, NJDEP
J. Rogalski, NJDEP
A. Miller, DOI
B. Sprague, EPA
TAT

POLREP NO.: Seven (7)
INCIDENT NAME: SCP Carlstadt-Cleanup
SITE/SPILL NO.: 65
POLLUTANT: PCB
CLASSIFICATION: Major
SOURCE: Tanks on Site
LOCATION: Carlstadt, New Jersey
AMOUNT: N/A
WATER BODY: Peach Island Creek

1. SITUATION:

A. During the period of September 6, 1986, to September 19, 1986, all of the stored and stabilized wastes for tanks T-8 and T-56 were removed for incineration. Total count for each tank was:

T-8 - 1,027 three and one-half
gallon buckets

T-56 - 92 thirty gallon plastic
drums

This completes the removal of sludges for these tanks.

B. Tanks T-8 and T-56 were dismantled and removed by a scrap dealer after wipe tests showed PCB values of less than 1 ppm. This completes the removal of tanks T-8 and T-56.

000304

C. Tank T-4 was knocked down, cut in half, hand scraped and washed down with a penatone and water solution which was run through a high pressure nozzle ("blaster"). A wipe sample has been taken and results are being awaited. Liquids previously in this tank are currently being stored in a tanker which also contains other low level contaminated water accumulated at the site.

D. All low level solid waste (contaminated soil; plastic sheeting, etc.) has been removed for disposal at the Chemical Waste Management's Model City Landfill in New York.

E. T-5 has been fenced off until work can begin on it's removal.

3. FUTURE PLANS AND RECOMMENDATIONS:

A. Operations have temporarily ceased until the result of the wipe sample from T-4 is available and until weathertight containers for material in T-5 can be obtained.

B. The tanker storing accumulated low level contaminated water is slated for removal on September 29, 1986.

FINAL POLREP _____ FURTHER
(TAT) POLREPS
FORTHCOMING X SUBMITTED BY: MA
Robert Harris, OSC
Response and Pre-
vention Branch

DATE RELEASED 9/25/86

000305

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

DATE: September 10 1986

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 548-8730 - Commercial & FTS
24 Hour Emergency

TO: C. Daggett, EPA
J. Marshall, EPA
F. Rubel, EPA
J. Feldstein, EPA
M. Randol, EPA
ERD, Washington, D.C.
(E-Mail)
G. Zachos, EPA
J. Berkowitz, NJDEP
J. Rogalski, NJDEP
A. Miller, DOI
B. Sprague, EPA
TAT

POLREP NO.: Six (6)
INCIDENT NAME: SCP Carlstadt-Cleanup
SITE/SPILL NO.: 65
POLLUTANT: PCB
CLASSIFICATION: Major
SOURCE: Tanks on Site
LOCATION: Carlstadt, New Jersey
AMOUNT: N/A
WATER BODY: Peach Island Creek

1. SITUATION

A. Responsible party removal continues. See previous POLREPS for details.

2. ACTION TAKEN

A. During the period of September 2, 1986 to September 5, 1986 all of the steel drums storing waste from T-4 and T-15 were removed for disposal at the Emele Alabama Landfill Facility. Total drum count was 344.

B. A bottle sample of the liquids used to decontaminate tanks T-4 and T-15 was collected and is being analyzed for PCB concentration.

C. Tank T-56 was washed down with a penatone and water solution.

D. Wipe samples for PCB concentrations were taken for T-8, T-15 and T-56..


000306

3. FUTURE PLANS AND RECOMMENDATIONS:

A. Material from T-8 and T-56 is awaiting removal for incineration and should occur in the next 1-2 weeks.

B. Decontamination and subsequent removal of the tanks will continue.

C. Material in T-5 will be removed and stored in a weathertight container until disposition of this material is decided upon.

FURTHER
POLREPS
FINAL POLREP _____ FORTHCOMING X SUBMITTED BY: 
(TAT) Robert Harris, OSC
Response and Pre-
vention Branch

DATE RELEASED 9/19/86

000307

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

DATE: September 2, 1986

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 548-8730 - Commercial & FTS
24 Hour Emergency

TO: C. Daggett, EPA
J. Marshall, EPA
F. Rubel, EPA
J. Feldstein, EPA
J. Randall, EPA
M. Randol, EPA
ERD, Washington, D.C.
(E-Mail)
G. Zachos, EPA
J. Berkowitz, NJDEP
J. Rogalski, NJDEP
A. Miller, DOI
B. Sprague, EPA
TAT

POLREP NO.: Five (5)
INCIDENT NAME: SCP Carlstadt-Cleanup
SITE/SPILL NO.: 65
POLLUTANT: PCB
CLASSIFICATION: Major
SOURCE: Tanks on Site
LOCATION: Carlstadt, New Jersey
AMOUNT: N/A
WATER BODY: N/A

1. SITUATION:

A. Responsible party removal continues. See previous POLREPS for details.

2. ACTION TAKEN:

A. During the period of August 2, 1986 to August 31, 1986, Tanks T-15, T-8, and T-56 were pumped free of sludge.

B. Sludge from T-15 was mixed with kiln dust and stored in 178 55-gallon steel drums and are awaiting removal to a landfill.

C. Sludge from T-8 was mixed with sawdust and placed in 1,027 3.5-gallon plastic buckets which have been stored pending removal for incineration.

D. Sludge from T-56 was mixed with sawdust and placed in 84 30-gallon plastic drums which have been stored pending removal for incineration.

E. Tank T-4 is being used to hold free liquids, such as

000308

F. A buried tank was discovered and has been excavated. This tank was open at the top and was filled with dirt and building debris. It is being viewed as contaminated.

G. Two of the three roll-offs containing contaminated soil from the previous spill, and assorted solid contaminated material, have been removed and are being transported to the Model City Landfill for disposal.

H. Decontamination of the tanks has begun. Tank pieces cut free from the main bodies of the various tanks have received an initial rinse with a penatone and water solution.

3. FUTURE PLANS AND RECOMMENDATIONS:

A. Removal of material stored in steel drums should begin during the first week of September 1986.

B. Decontamination of the tanks will continue.

C. Liquids stored in T-4 will be removed for incineration.

D. Material in Tank T-5 will be removed and stored in B-10 containers until disposition of this material can be decided upon.

FURTHER
POLREPS
FINAL POLREP _____ FORTHCOMING X SUBMITTED BY: Robert Harris, OSC
(TAT) Response and Prevention Branch

DATE RELEASED 9/5/86

000309

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

DATE: August 4, 1986

Region II
Response and Prevention Branch
Edison, NJ 08837

TO: C. Daggett, EPA
W. Librizzi, EPA
F. Rubel, EPA
J. Feldstein, EPA
J. Marshall, EPA
ERD, Washington, D.C.
(E-Mail)
G. Zachos, EPA
J. Berkowitz, NJDEP
J. Rogalski, NJDEP
A. Miller, DOI
B. Sprague, EPA

(201) 548-8730 - Commercial & FTS
24 Hour Emergency

POLREP NO.: Four (4)
INCIDENT NAME: SCP Carlstadt-Cleanup
SITE/SPILL NO.: 65
POLLUTANT: PCB
CLASSIFICATION: Major
SOURCE: Tanks on Site
LOCATION: Carlstadt, New Jersey
AMOUNT: N/A
WATER BODY: N/A

1. SITUATION:

A. Responsible party removal continues. See previous POLREPS for details.

2. ACTION TAKEN:

A. During the week of July 28, 1986 to August 1, 1986, Tank T-4 has been pumped free of all its sludge. The sludge has been mixed with kiln dust and placed into 55-gallon steel drums, and is now awaiting removal.

B. Tank T-15 has been partially pumped and has been handled in the same manner as T-4. Approximately 130 drums of material are now stored for removal.

C. All of the contaminated soil from the spill of the previous week has been placed in lined and covered rolloffs. The rolloffs are being stored on site pending landfill acceptance and permits.

000310

3. FUTURE PLANS AND RECOMMENDATIONS:

A. The pumping of T-15 will continue to be followed by the pumping of the other tanks. The exact order of pumping is not scheduled but T-8 will probably be next, to be followed by T-56.

FINAL POLREP _____ FURTHER
POLREPS
FORTHCOMING X SUBMITTED BY: Robert Harris (for)
(TAT) Robert Harris, OSC
Response and Pre-
vention Branch

DATE RELEASED 8/26/86

000311

U.S. ENVIRONMENTAL PROTECTION AGENCY. REGION II

POLLUTION REPORT

DATE: July 31, 1986

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 548-8730 - Commercial & FTS
24 Hour Emergency

TO: C. Daggett, EPA
W. Librizzi, EPA
F. Rubel, EPA
J. Feldstein, EPA
J. Marshall, EPA
ERD, Washington, D.C.
(E-Mail)
G. Zachos, EPA
J. Berkowitz, NJDEP
J. Rogalski, NJDEP
A. Miller, DOI

POLREP NO.: Three (3)
INCIDENT NAME: SCP Carlstadt-Cleanup
SITE/SPILL NO.: 65
POLLUTANT: PCB
CLASSIFICATION: Major
SOURCE: Tanks on Site
LOCATION: Carlstadt, New Jersey
AMOUNT: N/A
WATER BODY: N/A

1. SITUATION:

A. Responsible party removal continues. See previous POLREPS for details.

2. ACTION TAKEN:

A. During the period of July 21 to July 25, 1986, tanks T-15, T-4 and T-56 were cut open for access.

B. Most of the sludge in T-4 and some of T-15 was pumped out by a vac truck ("guzzler").

C. A spill of pumped sludge occurred when the back of the vac truck was accidentally opened. This spill was cleaned up immediately and is covered in detail under a separate POLREP. Contaminated soil from this spill is being stored in a covered roll-off until it can be removed.

D. Seventy drums of sludge, stabilized with kiln dust, have been filled and are being stored for removal.

000312

3. FUTURE PLANS AND RECOMMENDATIONS:

A. The pumping of sludge from tanks T-4 and T-15 is expected to continue, as will the mixing of kiln dust for stabilization and the storage of contaminant in steel drums pending final removal.

FURTHER
POLREPS
FINAL POLREP _____ FORTHCOMING X SUBMITTED BY: *RJH*
(TAT) Robert Harris, OSC
Response and Pre-
vention Branch

DATE RELEASED 8/8/86

000313

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

DATE: July 21, 1986

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 548-8730 - Commercial & FTS
24 Hour Emergency

TO: C. Daggett, EPA
W. Librizzi, EPA
F. Rubel, EPA
J. Feldstein, EPA
J. Marshall, EPA
ERD, Washington, D.C.
(E-Mail)
G. Zachos, EPA
J. Berkowitz, NJDEP
J. Rogalski, NJDEP
A. Miller, DOI

POLREP NO.: Two (2)
INCIDENT NAME: SCP Carlstadt-Cleanup
SITE/SPILL NO.: 65
POLLUTANT: PCB
CLASSIFICATION: Major
SOURCE: Tanks on Site
LOCATION: Carlstadt, New Jersey
AMOUNT: N/A
WATER BODY: N/A

1. SITUATION:

A. A responsible party cleanup of PCB contaminated liquid and sludge has commenced at a former Scientific Chemical Processing Plant in Carlstadt, New Jersey. For more detail, see previous POLREP.

2. ACTION TAKEN:

A. Samples of all five tanks were taken on April 18, 1986. Results show very high concentrations of PCB, as well as high concentrations of mercury, lead and chromium.

B. During the period of July 14-18, 1986, Inmar and Associates contracted Chemical Waste Management to clean and remove five tanks containing contaminated sludge and liquid. Final disposal of the contaminants is still unsettled.

C. Chemical Waste Management has delineated a hot zone, drum storage zone, contamination reduction zones, support area and command post. Appropriate signs warning of entry and prohibiting smoking have been posted.

000314

D. Tank T8 has had it's top removed and been pumped free of liquids. The liquids are being stored in 55 gallon steel drums until removal from the site can be effected.

E. Tank T56 has been pumped in the same manner, however, the rubber lining in the tank has deteriorated and rubber debris has been clogging the pump. Some liquid remains, but will probably be removed on the next working day.

3. FUTURE PLANS AND RECOMMENDATIONS:

A. Cleanup activity will continue and will take about another month. The tanks will be cut by cold saw in the near future, but the exact date is uncertain due to difficulty in obtaining experienced cutting personnel.

FINAL POLREP _____ FURTHER
(TAT) POLREPS FORTHCOMING X SUBMITTED BY: *Robert Harris*
Robert Harris, OSC
Response and Pre-
vention Branch

DATE RELEASED 7/28/86

000315

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

POLLUTION REPORT

DATE: April 11, 1986

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 548-8730 - Commercial & FTS
24 Hour Emergency

TO: C. Daggett, EPA
W. Librizzi, EPA.
F. Rubel, EPA
J. Feldstein, EPA
J. Marshall, EPA
ERD, Washington, D.C.
(E-Mail)
G. Zachos, EPA
J. Berkowitz, NJDEP
J. Rogalski, NJDEP
A. Miller, DOI

POLREP NO.: One (1)
INCIDENT NAME: SCP Carlstadt-Cleanup
SITE/SPILL NO.: 65
POLLUTANT: PCB
CLASSIFICATION: Major
SOURCE: Tanks on Site
LOCATION: Carlstadt, New Jersey
AMOUNT: N/A
WATER BODY: N/A

1. SITUATION:

A. Four above ground storage tanks and one tank trailer containing PCB contaminated liquid and sludge have been left abandoned at a former waste treatment facility formerly operated by Scientific Chemical Processing (SCP), which had leased the area from Inmar Associates.

B. An estimated 34,720 gallons of material occupy the tanks and, although not directly observed, are believed to be leaking because stained ground has been observed around the tanks.

C. Removal is being effected by the responsible party, Inmar Associates through a private contractor, Chemical Waste Management, Incorporated.

000316

2. ACTION TAKEN:

A. During the period of April 2, 1986, through April 10, 1986, three truckloads of liquid waste, each about 4,500 gallons, were removed from the site by the responsible party and taken to Chicago for incineration.

B. Almost all of the liquid has been removed and most of what remains is sludge.

3. FUTURE PLANS AND RECOMMENDATIONS:

A. Sampling of the sludge will take place in about two weeks.

B. Steve O'Reilly of Inmar Associates (the responsible party) has requested that prior to sampling, representative of, or for, the EPA examine the site with responsible party representatives to review and agree on procedures.

C. Peter Martorano, Carlstadt Fire Officials, has requested he be notified whenever removal activity is taking place at the site. His phone number is (201) 939-1777.

FURTHER
POLREPS
FINAL POLREP _____ FORTHCOMING X SUBMITTED BY: Robert Harris
(TAT) Robert Harris, OSC
Response and Pre-
vention Branch

DATE RELEASED 5-5-86

000317

APPENDIX 5
STATUS OF TANK T-5

000318

T-5 STATUS

Tank T-5 sludge continues to present a "Catch-22" disposal problem: its PCB concentration (32,000+ ppm), it too high for disposal by landfilling, but it can not be incinerated because of its high heavy metal content (50,700 ppm lead, plus noteable amounts of mercury, cadmium, and chromium). Inmar Associates had proposed landfilling of the sludges, however, this idea has been rejected by the EPA.

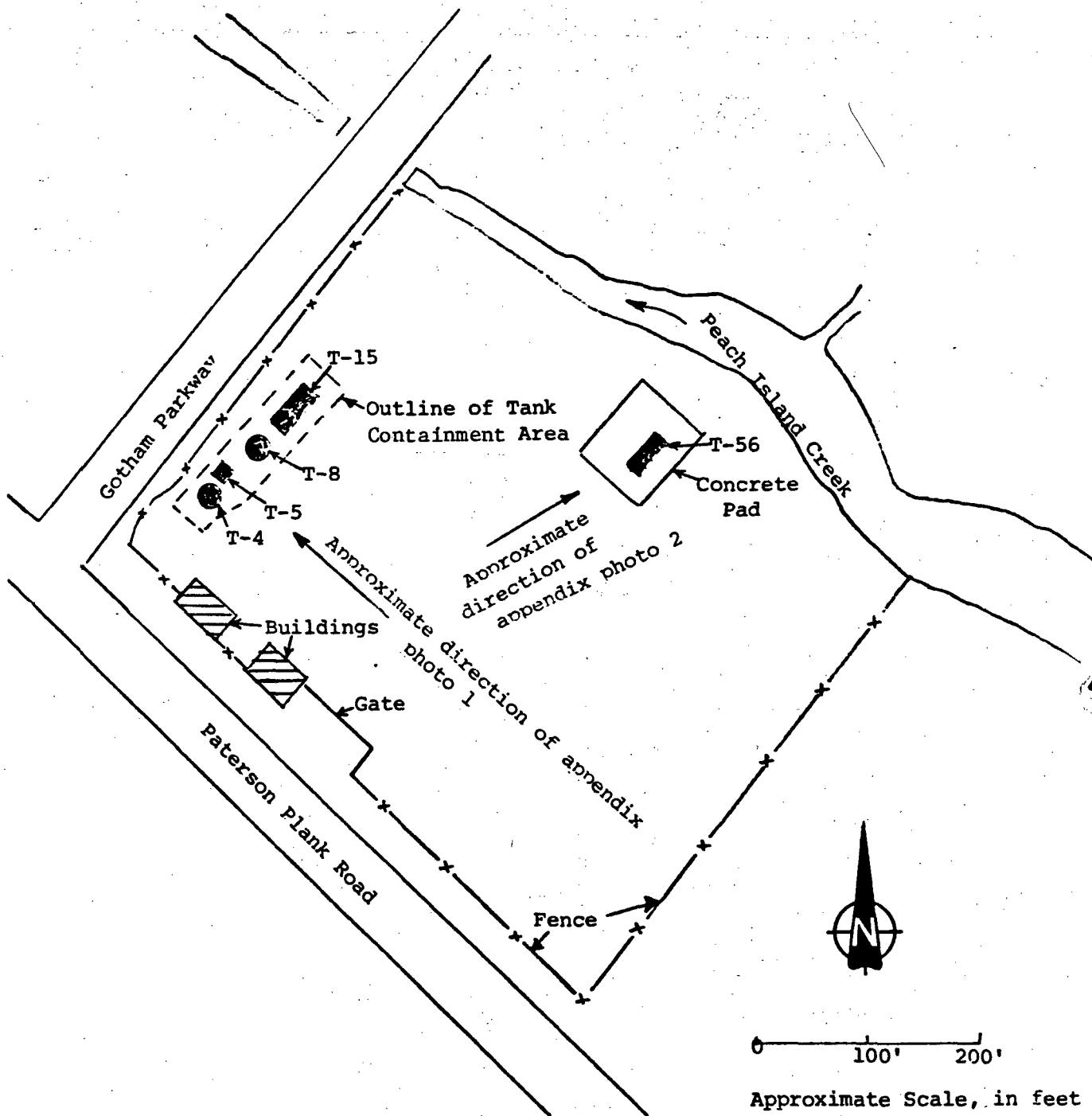
Because the presence of T-5 was delaying the start of the remedial investigation, and because T-5 was leaking, Inmar was instructed to re-package the sludge in a safe container until a disposal method could be decided upon. This, however, was not done until December 15, 1986, the final deadline given to Inmar in a December 4 letter from the EPA Office of Regional Counsel. On that day, a TAT member visited the site and found the tank to have been placed in a roll-off, which had been lined with plastic, and covered with a heavy-duty tarp. The roll-off/T-5 combination had been placed on the concrete pad formerly occupied by Tank T-56. The OSC subsequently visited the site, and determined that this arrangement would be satisfactory.

In the interim, because of the long delay on the part of Inmar to take any action regarding this tank, EPA began to make plans for an emergency removal of the tank and it's sludge. This effort was cut short when T-5 was placed into the roll-off.

Also in the interim, the OSC requested TAT study the problem to determine if alternative disposal methods were available, and to recommend the best alternative for this situation. This study, unfortunately, did not offer any new, or better, alternatives.

Correspondence concerning these matters, and photos of the T-5/roll-off combination, are presented in this appendix.

000319



Notes;

- 1) Tank locations are approximate and not to scale.
- 2) Base map reference: aerial photograph no. 3818-6-35, March 27, 1984. Scale 1"=100'



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EPA PM

R. Harris

TAT PM

J. M. Simonsen

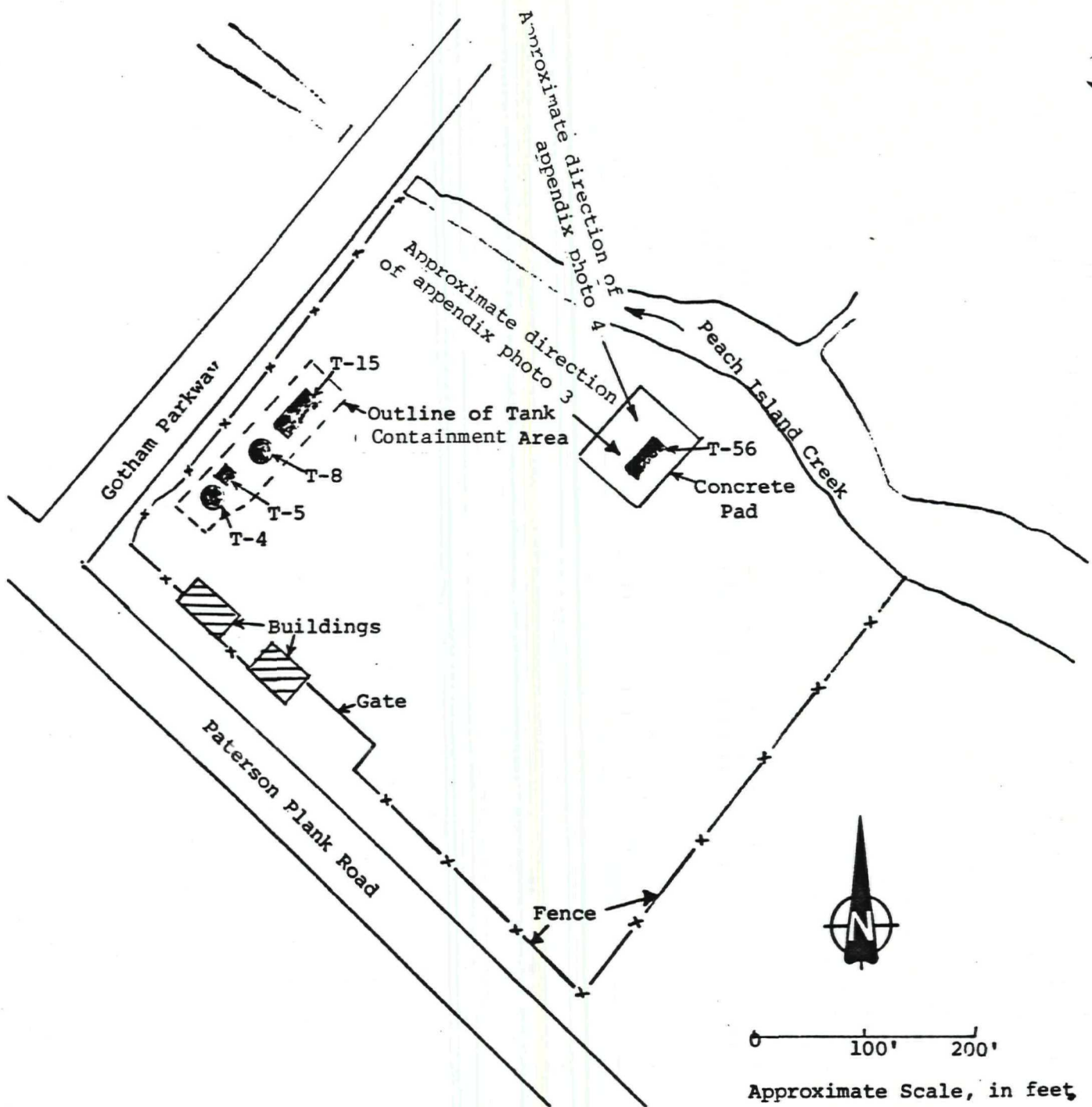


APPENDIX 5, PHOTO 1: Site formerly occupied by T-5. View is toward the northwest, Gotham Parkway is in the background, behind fence.



APPENDIX 5, PHOTO 2: T-5 at its new location: the concrete pad formerly occupied by T-56 (compare with photo 2 of main text). View is to the northeast.

000320



Notes;

- 1) Tank locations are approximate and not to scale.
- 2) Base map reference: aerial photograph no. 3818-6-35, March 27, 1984. Scale 1"=100'



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R. Harris

000321

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TAT PM

J. M. Simonsen



APPENDIX 5, PHOTO 3: T-5/roll-off combination on concrete pad. Outline of roll-off visible under tarp. View is to southeast.



APPENDIX 5, PHOTO 4: Close up of T-5/roll-off combination. Note PCB warning label and outline of roll-off under tarp. View is to southeast.



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TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-01-6669

TAT-02-F-03235

MEMORANDUM

TO: Bob Harris
Response and Prevention Branch, U.S. EPA

FROM: Jeffrey Simonsen, TAT PM JMS
William Kowalski, TAT QC wgk

SUBJECT: Disposal Options for T-5 Wastes,
SCP/Carlstadt

DATE: October 8, 1986

As per your request (attachment to TDD #8610-18) I have studied the Hazardous Waste Evaluation and Disposal Criteria Operations Manual as it pertains to the disposal of the sludges from tank T-5 at SCP/Carlstadt. Unfortunately, because of the unique nature of the T-5 waste (high PCB and heavy metals), the report does not offer any real help. Wastes from T-5 are unique and, there is no procedure, technology, or technique outlined in the manual to handle this particular situation.

The following is a brief summary of what I have learned about the usual disposal techniques, as they would apply to T-5, based on my reading the report and extensive conversation with the authors.

1. Incineration - Because of the heavy metal content (lead, chromium, cadmium and mercury), it is unlikely T-5 waste will be accepted for incineration. All of the 3 available incinerators are currently operating with a six-month backlog and have indicated that the disruption of activity caused by incinerating this waste would be unacceptable. Additionally, incineration of this waste would release to the atmosphere a substantial amount of several highly toxic metal compounds and the change in the potential route of exposure could create a threat to health greater than that which currently exists.

000323

2. Landfilling - Although not permitted by EPA regulations (because of the high PCB level), it may be possible to obtain a variance and have the wastes landfilled. According to Chemical Waste Management personnel, their facility at Emelle, Alabama will accept the wastes in question.
3. On Site Treatment - No technology for this is available.
4. Precipitation of Heavy Metals - This is not believed to be feasible as the technology is very questionable, at best.

JS/WK:ls

000324



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TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-01-6669

TAT-02-F-03336

MEMORANDUM

TO: Bob Harris
Response and Prevention Branch, U.S. EPA

FROM: Jeff Simonsen, TAT II PM *JS*
Bill Kowalski, TAT II QC *wjk*

SUBJECT: SCP/Carlstadt, T-5

DATE: December 16, 1986

As per our phone conversation relating to TDD #8612-17, in anticipation of a CERCLA removal of tank T-5, I have been examining removal options so that the underground investigation may begin.

I recommend that T-5 be placed into another vessel: in this way the threat of leakage onto the site is removed, the tank can be placed out of the way of the investigation crews, and there is a minimum of materials handling.

Because the disposal method for T-5 has not yet been decided upon, transferring T-5's material to either drums or bulk containers may be a waste of time, money and effort. If the material is transferred to bulk containers, and it is later decided that it must be placed into drums, the bulking process will have been an unnecessary and expensive intermediate step. Conversely, if the material is placed into drums when it could have been bulked, that will have been a very expensive, unnecessary intermediate step, as well as having increased the level of exposure to workers, and increasing the possibility of a release to the environment.

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Placing T-5 into another container would take about one week, versus two weeks for bulk storage, and three weeks for drumming (see attached graph). The container could be built on site from standard steel plates welded into position, which should make the cost of the container competitive with the cost of the number of drums or bulk containers required. Additionally, because less equipment and fewer workers would be required (and all for substantially less time) this method should be a substantially less expensive intermediate step than the options of drumming or storing in bulk containers.

Attachments



SHEET ____ of ____

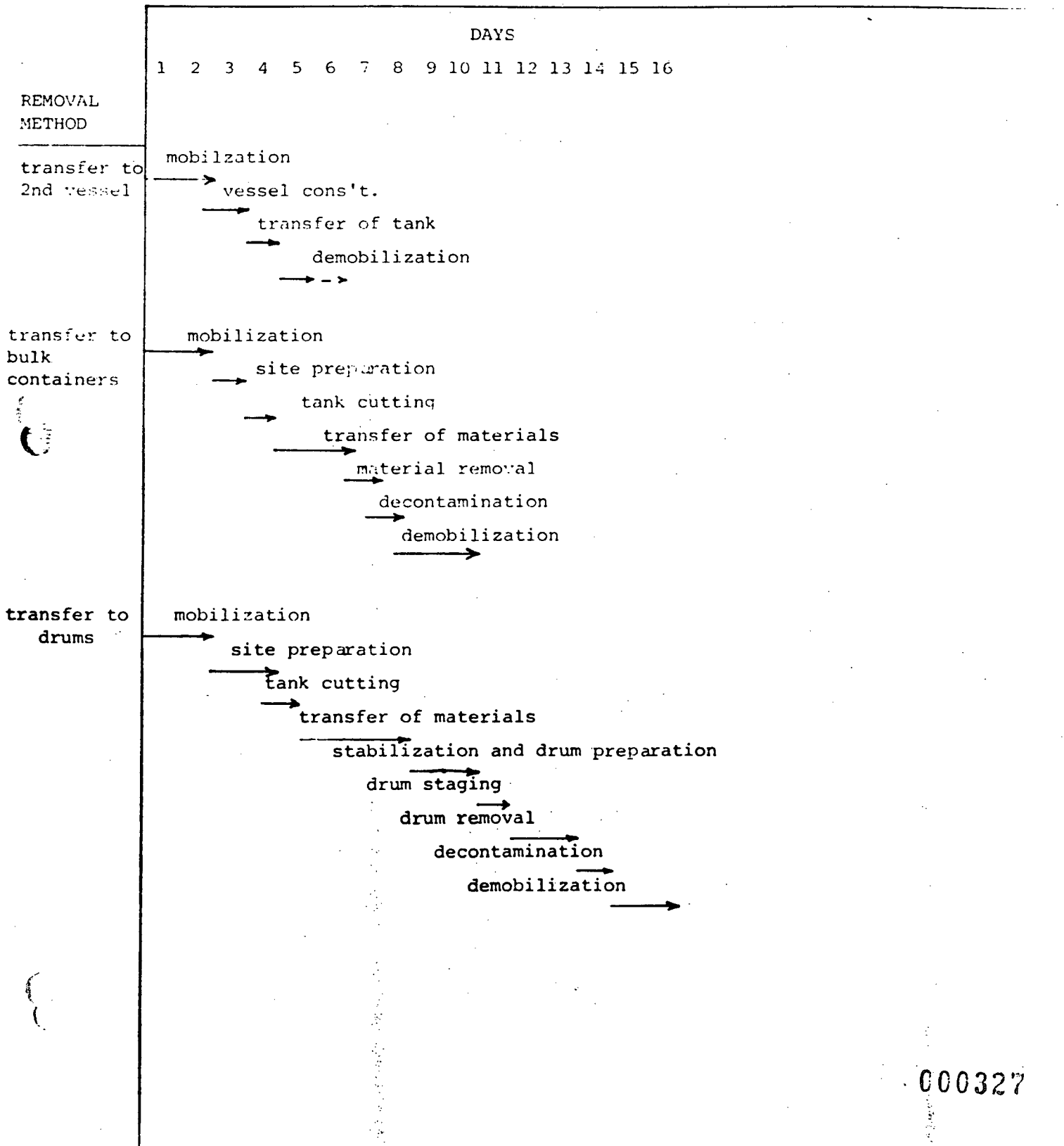
CLIENT/SUBJECT USEPA R. Harris / SCP-Carlstadt W.O. NO. _____TASK DESCRIPTION Removal schedules for T-5, Various options TASK NO. _____PREPARED BY J.M. Simonsen DEPT. _____ DATE _____

MATH CHECK BY _____ DEPT. _____ DATE _____

METHOD REV. BY _____ DEPT. _____ DATE _____

APPROVED BY _____

DEPT. _____ DATE _____



000327

4 DEC 1986

**EXPRESS MAIL
RETURN RECEIPT REQUESTED**

**Mr. Steve O'Reilly
Inmar Associates
1703 E. Second Street
Scotch Plains, New Jersey 07076**

**Re: Administrative Order Index No. II-CERCLA-50115 for the
Scientific Chemical Processing ("SCP") Site
216 Paterson Plank Road
Carlstadt, New Jersey 07076**

Dear Mr. O'Reilly:

The purpose of this letter is to reiterate our concern about the presence of the PCB contaminated materials which remain in tank T5 on the SCP Carlstadt site and which presence constitutes a violation of the aforementioned order.

As you are aware, the Administrative Order cited above which was issued to Inmar Associates ("Inmar") on October 23, 1985 mandated that Inmar accomplish proper offsite disposition of all tanks and trailers and their contents which existed on the SCP Carlstadt site. These activities were to be completed no later than two (2) months after the commencement of work at the site.

Although work started at the site in February 1986, some removal activities which were mandated by the order have not yet been completed and, in the case of disposition of the tank T5 contents, have not yet even been started.

In our letter dated July 24, 1986, EPA had indicated to you that remedial activities could not proceed due to the presence of tank T5 and its contents on the site. We had also informed you that repackaging of the material in tank T5 might be needed in order to avoid any further delay(s) in starting remedial activities at the site.

By letter dated August 27, 1986, EPA had mandated that Inmar immediately empty tank T5 and repackage its contents so that further investigations could proceed at the site. We had requested that this repackaging be completed within one (1) week after your receipt of that letter.

NJS-DRC NJS-DRC ERKD

ERKD

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Finally, in our letter dated October 31, 1986, we once again urged Inmar to immediately repackage the contents of tank T5.

To date, your company has failed to properly dispose of or even repackage and relocate the PCB contaminated material in tank T5 so that other remedial actions could begin at the site. Your failure to empty tank T5, decontaminate and dispose of the tank and and repackage the PCB contents therein are clear violations of the order which was issued to Inmar in October 1985.

The presence of the PCB material in tank T5 at the SCP Carlstadt site constitutes an ongoing hazard to the public and an impediment to other investigatory and cleanup activities at the site.

We therefore demand that Inmar empty the contents from tank T5, properly decontaminate and provide for offsite disposal of the tank and repackage the PCB contaminated material therein on or before Monday, December 15, 1986.

If this work is not performed by this date, the Agency will take any actions needed to mitigate the hazard(s) which exist at the site and/or will initiate any enforcement action(s) it deems necessary.

Sincerely yours,

James P. Rooney
Attorney
Office of Regional Counsel

cc: Edward Egan, Esq.
Alfred Porro, Esq.
Christine Altomari, NJDEP
John Covino, NJAG

bcc: J. Feldstein
R. Harris

000329

APPENDIX 6
SITE SAFETY PLAN

000330

SITE SAFETY PLAN

Prior to the beginning of operations at the site, no site operations plan, including a safety plan, had been filed with the EPA. Because of concern by the EPA OSC, TAT developed a site safety plan for this project. A copy of this plan was given to Chem Waste Management, contractor to Inmar.

Chem Waste developed, and implemented its own site safety plan, which was quite similar to the TAT plan.



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TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION

EPA CONTRACT 68-01-6669

TAT-02-F-03018

MEMORANDUM

TO: Robert Harris
Response and Prevention Branch, U.S. EPA

FROM: for Jeffrey Simonsen, TAT II *Michael A. Simonsen*

SUBJECT: SCP/Carlstadt Site Safety
TDD #2-8603-41A

DATE: June 11, 1986

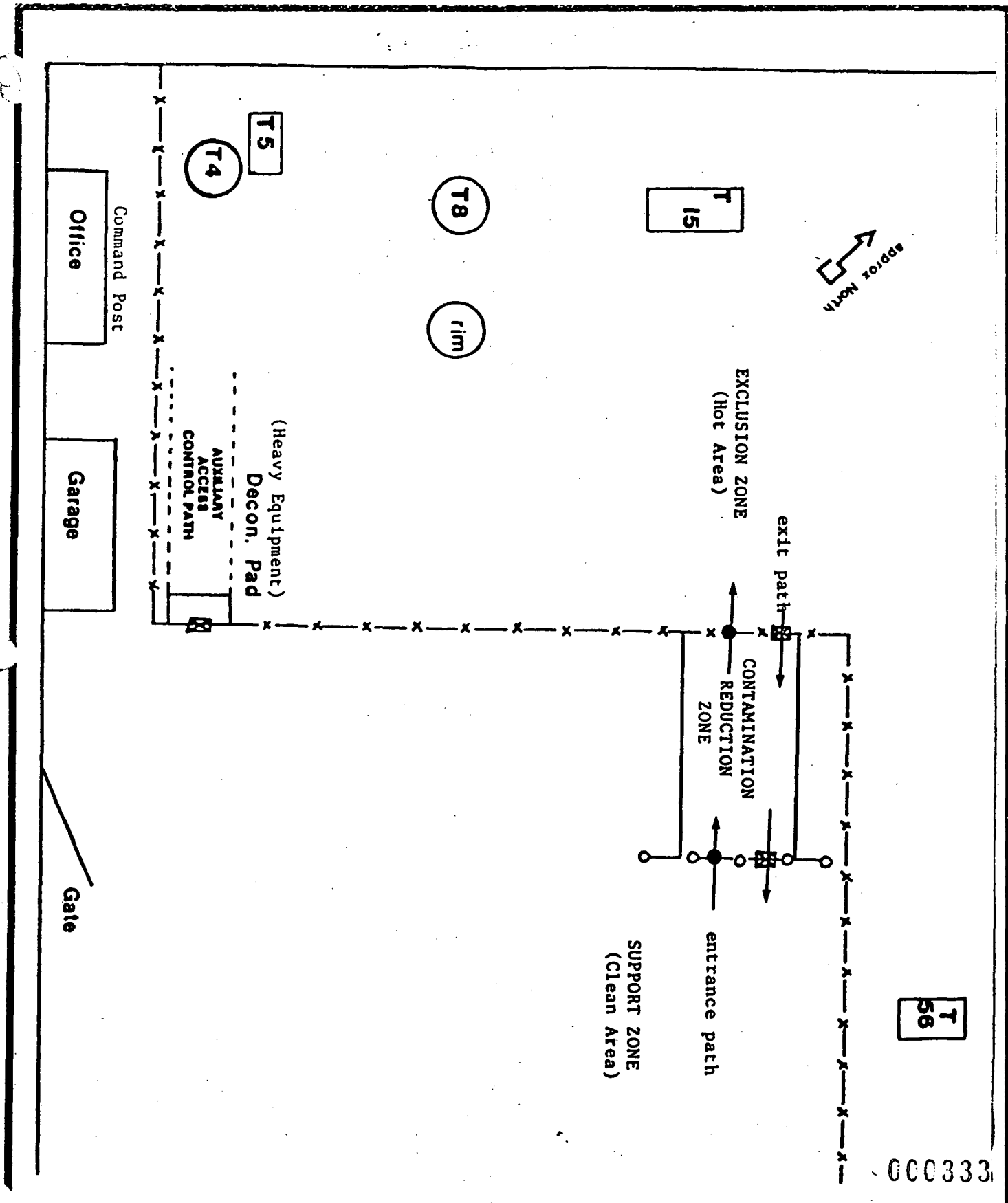
Attached are diagrams to show zoning and decontamination procedures for the above site. They are based on air sampling taken during two separate periods (during which time no readings above background were found), as well as a site examination by the TAT Regional Safety Officer.

Figure 1 is an unscaled map showing the support, exclusion and contamination reduction zones.

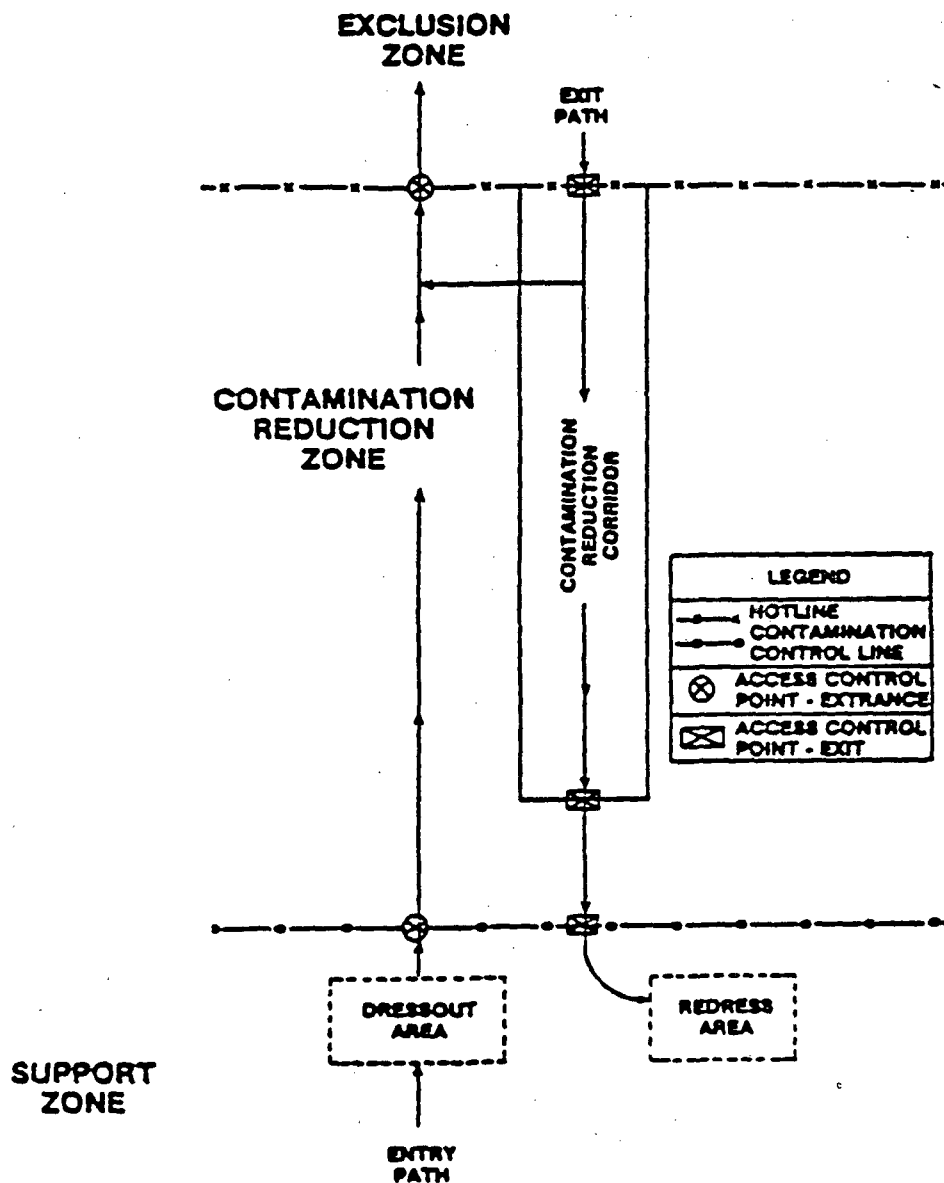
Figure 2 shows the layout of the contamination reduction zone, including site entry and exit points, while Figures 3 and 4, respectively show the detailed steps for Level "C" and Level "B" contamination reduction.

Attachments

JS:ls



WESTON CONSULTANTS SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM B. Farris	Figure 1 Sketch Map No Scale
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Simonsen	SCP/Carlstadt



CONTAMINATION REDUCTION ZONE LAYOUT

000334



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EPA PM

B. Harris

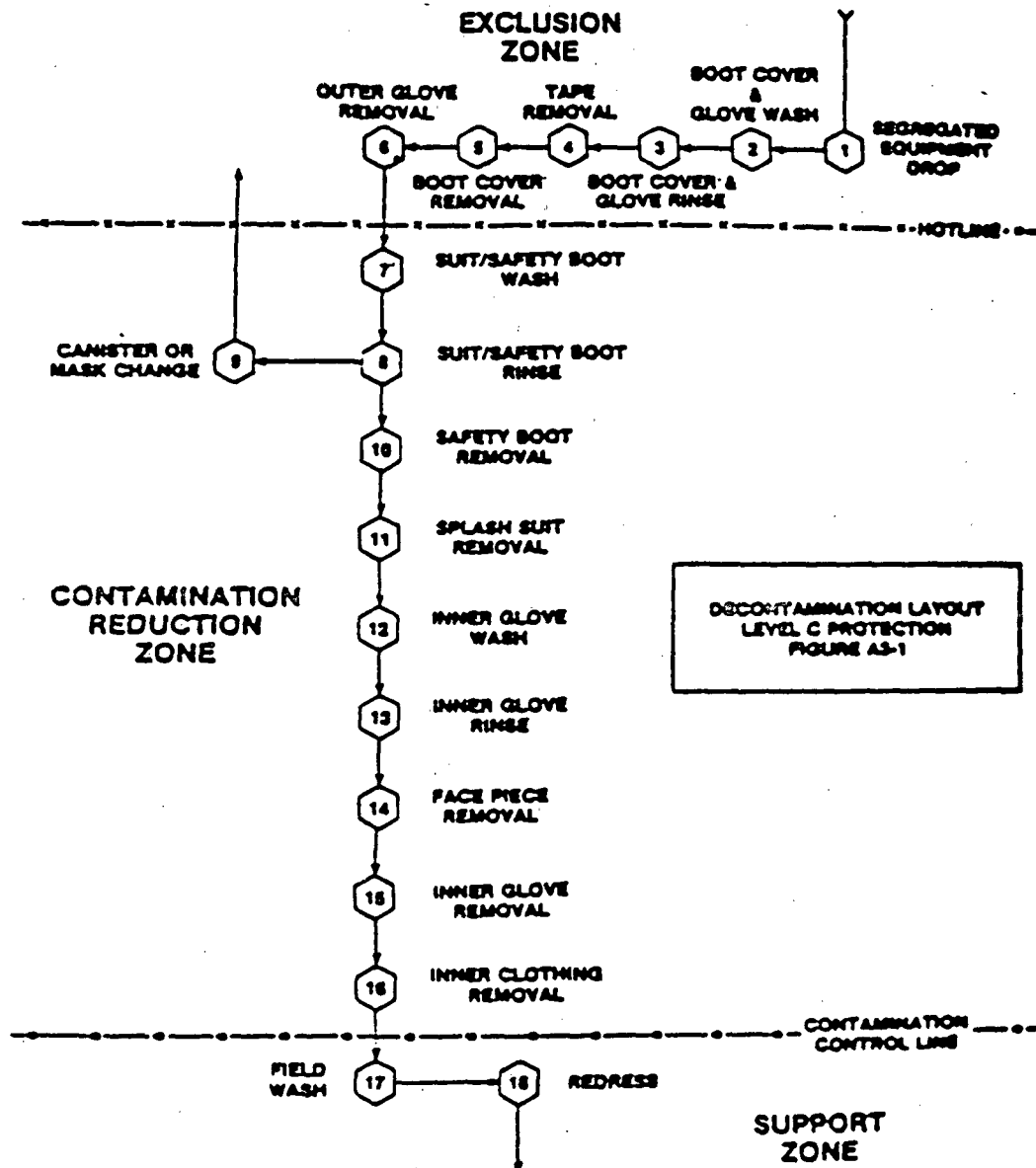
Fig. 2

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TAT PM

J. Simonsen

Contamination
Reduction Zone



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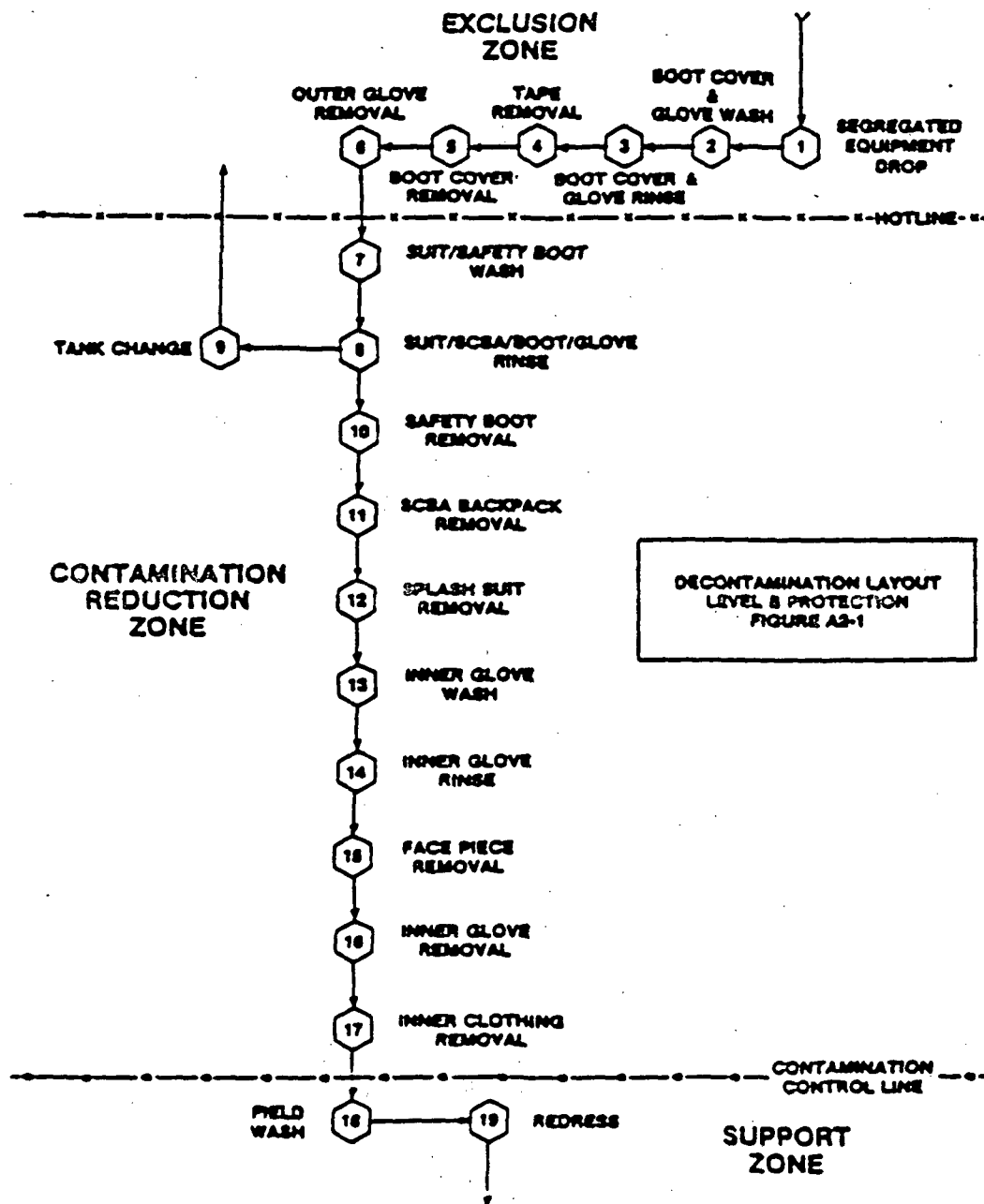
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Figure 3 Level C
Contamination
Reduction Zone



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Figure 4
Level B

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Contamination
Reduction Zone